NATIONAL GEOGRAPHIC

HISTORY

MEDIEVAL CONQUEST
TALE OF THE BAYEUX TAPESTRY

BIRTHPLACE OF THE BUDDHA
EXCAVATION AT LUMBINI

CLEOPATRA'S HEIR
SON OF ROME AND EGYPT

MACHIAVELLI
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The Bayeux Tapestry tells the tale of William the Conqueror's victory in 1066 at the Battle of Hastings over King Harold II of England. The story unfurls like a giant comic strip as dozens of scenes portray the events leading up to the battle and then the conflict itself.

The first time I saw the Bayeux Tapestry was not in a book or a museum. It was thanks to two students at the Academy of Media Arts in Cologne, Germany. In 2002 they designed the Historic Tale Construction Kit, a computer application that allowed users to create stand-alone images of the people and beasts from the tapestry and add their own text. Their popular site spawned thousands of medieval memes that spread across the internet.

I was a fan: Not only did the memes make me laugh, they sparked my curiosity, leading to exploration of the massive tapestry's history. It's one more piece of evidence that inspiration to explore the past doesn't have to come in a classroom or from a book. It can come from anywhere.

Amy Briggs

Amy Briggs, Executive Editor

P.S. For readers who also enjoy podcasts, I'm happy to share that I have joined *Overheard at National Geographic* as co-host with Peter Gwin. Each episode takes our listeners on a thought-provoking audio journey with National Geographic explorers, writers, and photographers. For more information, visit ***www.natgeo.com/overheard.***

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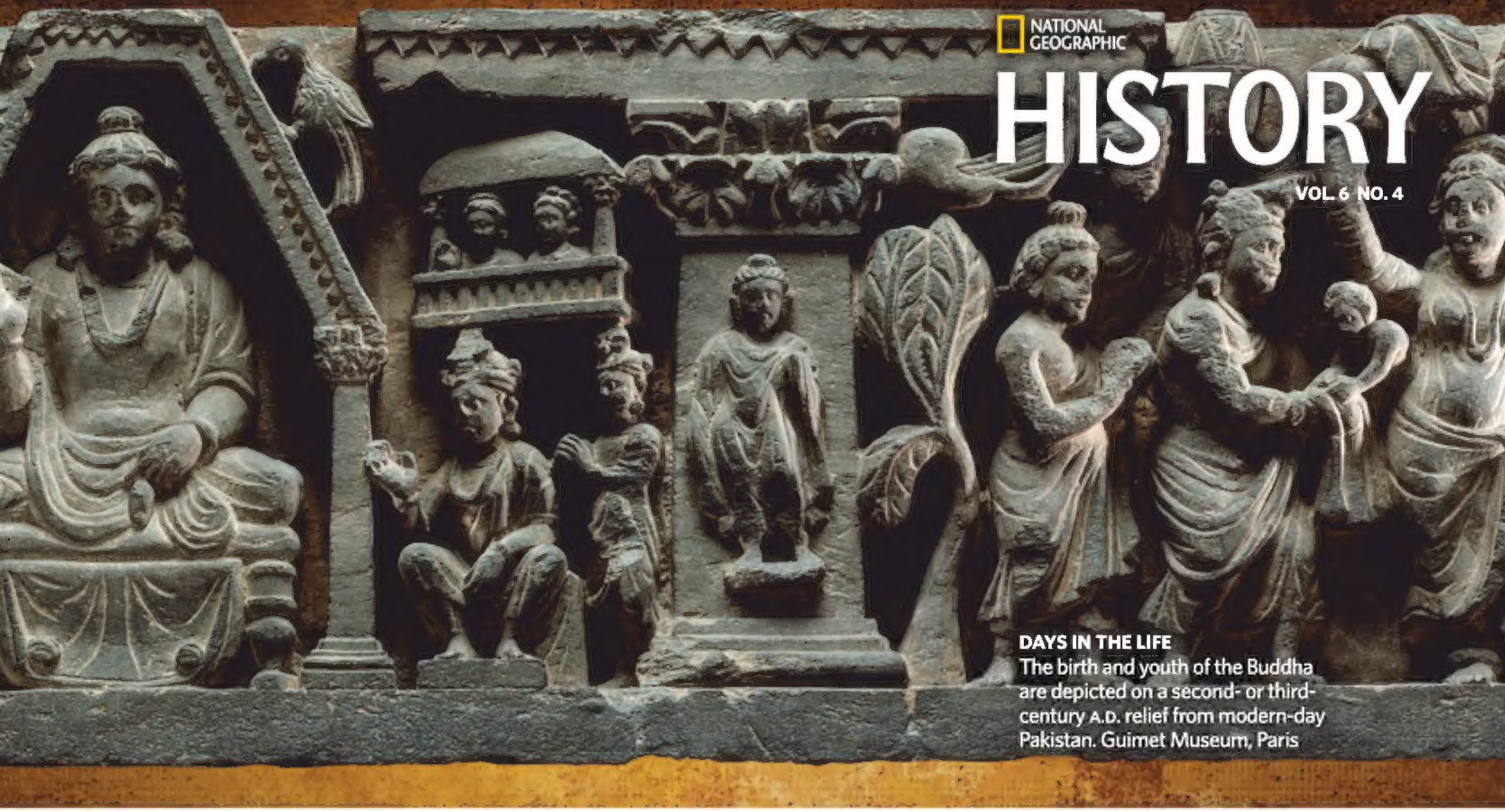
National Geographic History (ISSN 2380-3878) is published bimonthly in January/February, March/April, May/June, July/August, September/October, and November/December by National Geographic Partners, LLC, 1145 17th Street, NW, Washington, DC 20036. Volume 6, Number 4. $29 per year for U.S. delivery. Periodicals postage paid at Washington, DC, and additional mailing offices. **SUBSCRIBER:** If the Postal Service alerts us that your magazine is undeliverable, we have no further obligation unless we receive a corrected address within two years. **POSTMASTER:** Send address changes to *National Geographic History*, P.O. Box 37545, Boone, IA, 50037. In Canada, agreement number 1000010298, return undeliverable Canadian addresses to *National Geographic History*, P.O Box 819 STN Main, Markham, ON L3P 9Z9.

NATIONAL GEOGRAPHIC

HISTORY

VOL. 6 NO. 4



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The birth and youth of the Buddha are depicted on a second- or third-century A.D. relief from modern-day Pakistan. Guimet Museum, Paris

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Details of the life story of the Buddha, whose journey to enlightenment inspired a great global religion, have long eluded scholars. New finds at Lumbini, the Buddha's birthplace, may now be providing some answers.

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In early 44 B.C. Queen Cleopatra had high hopes for Caesarion, her son with Julius Caesar, but her lover's assassination on the Ides of March would change Caesarion's destiny and end Ptolemaic rule of Egypt.

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Drawing on his expertise in partisan intrigue and political survival, Florentine diplomat Niccolò Machiavelli wrote *The Prince* in 1513, now a revered and reviled classic in political science.

MACHIAVELLI, PORTRAIT BY SANTI DI TITO. PALAZZO VECCHIO, FLORENCE

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Lakshmi Bai, queen of Jhansi in the mid-19th century, rejected
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As the population boomed in Victorian London, cemeteries
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In an age of discarding the old and ushering in the new, France's leading minds devised a uniform scientific system to measure their brave new world.

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Thousands of rock carvings cover the stones of Tamgaly in
Kazakhstan. Starting in the Bronze Age, these petroglyphs cataloged vivid images of sun gods, dancing shamans, and horned horses.

WHAT'S IN A NAME The curse tablets (above) were found in a spring-fed well at the Kerameikos Cemetery, Athens. The well waters were believed to transport a person's wishes to the underworld. The newly discovered tablets have yet to be translated, but previous finds show that while the names of the cursed appear, the authors' names are almost never included.

JUTTA STROSZECK

THE WELL AT KERAMEIKOS CEMETERY IN ATHENS WHERE THE CURSE TABLETS WERE DISCOVERED LIES UNDER THE WOODEN COVER IN THE LOWER LEFT OF THE IMAGE.
JUTTA STROSZECK

NG MAPS

KERAMEIKOS was the main burial ground for Athens from 1050 B.C. to around A.D. 600. Excavation of the site, begun in 1863, covers nearly 10 acres divided into 50 grave precincts. Curse tablets have been found in only three sections.

ANCIENT CUSTOMS

Ancient Greeks Threw Curses Down the Well

At an ancient Athenian cemetery, archaeologists found evidence of people making dark appeals to the gods to bring misfortune to others.

Curses are often associated with fairy tales and witches, but archaeologists have discovered evidence of them in ancient Greece. Scratched onto pieces of lead, entreaties to the gods of the underworld were buried in tombs, but archaeologists have discovered 35 tablets from the fourth century B.C. at the bottom of a well, a rare example of an already unusual practice.

Researchers at the Kerameikos cemetery in Athens have unearthed 6,500 burials, finding only 60 curse tablets, said Jutta Stroszeck, head of the Kerameikos excavation for the German Archaeological Institute.

Although uncommon, curse tablets dating between the sixth century B.C. and sixth century A.D. have been found throughout the ancient Mediterranean world. To make a curse effective, such objects had to be buried in a tomb, which was risky business: The sender had to violate the sanctity of burial by disturbing

ARCHAEOLOGISTS FOUND EVIDENCE AT KERAMEIKOS OF A RARE RITUAL PERFORMED AT A CHILD'S TOMB CIRCA 410-390 B.C. A FIGURINE (ABOVE RIGHT) HAD BEEN PLACED IN A COFFIN (ABOVE LEFT) AND SEALED WITH A LID (LEFT). THE LID AND DOLL ARE COVERED WITH THE NAMES OF THOSE CURSED BY THE SENDER.

JUTTA STROSZECK

graves at night. Curses could not just be placed in any tomb either; they had to be those belonging to the freshly buried who had died unexpectedly, such as children, murder victims, or soldiers. It was believed these "unquiet" souls stayed active for a period, traveling down to the underworld and back up again, making them suitable candidates for carrying messages to Hades.

Old Message, New Medium

After Demetrius Phalereus, ruler of Athens from 317 to 307 B.C., banned the use of lavish burial monuments, he instituted patrols to enforce the law. Burying curse tablets became even riskier. Consequently, tossing the tablets into wells became a safer alternative, archaeologists believe.

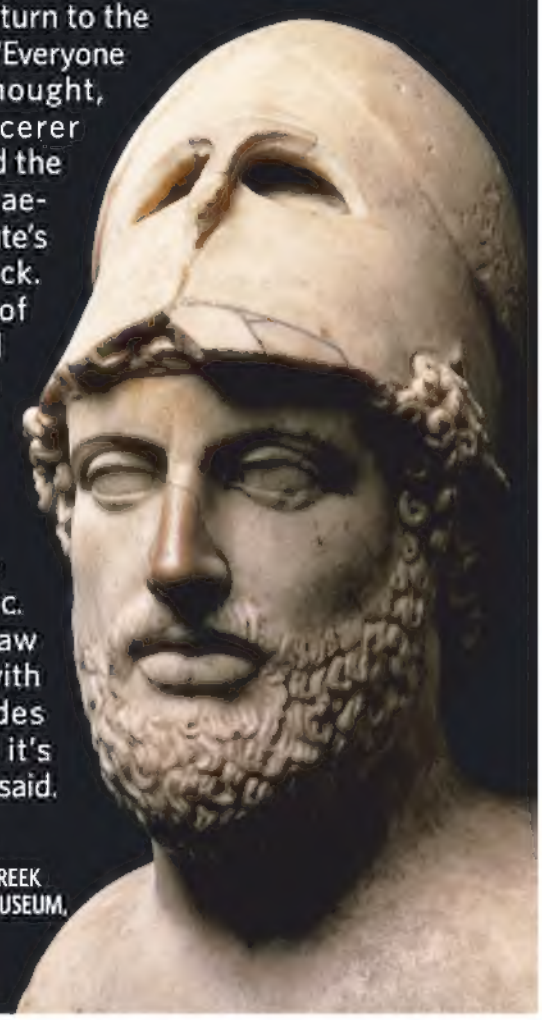
Instead of relying on restless spirits, curses traveled through the spring water that flowed to the underworld. "The belief was that throwing the curse into a well would activate it," said Stroszeck, who added that, until this discovery, only a handful of tablets had been found at the bottom of wells at Kerameikos.

Stroszeck's team is now translating the tablets, but they expect they will feature the same four themes of curses found throughout the Mediterranean region: love (usually unrequited), business, athletic contests, and lawsuits. For example, the sender might request that an object of affection reject the advances of a rival, a business competitor lose all his clients, or a charioteer run a bad race.

The quality of curse-writing on the tablets varies greatly, Stroszeck said, indicating that all levels of society took part in the custom. Some are little more than chicken scratch, while others made use of professional writers who specialized in curses. "They reversed the flow of words and used magical phrases," said Stroszeck. "It was something like abracadabra, giving more value to the curse."

THE CASE OF THE TONGUE-TIED POLITICIAN

CURSES sometimes spilled into public life in classical Greece. In his play *The Wasps,* Aristophanes alluded to the real-life feud between an aristocrat, Thucydides, and Pericles, leader of the democratic party. An incident in the Athenian Assembly in 444 B.C. led to the belief a judicial curse was at work. Thucydides decried Pericles' building plans in Athens, calling him a spendthrift. When Pericles said he would pay for the construction himself, Thucydides, a veteran orator, froze in mid-retort. His paralysis may have been caused by a stroke, but in the ancient world, suspicions could quickly turn to the supernatural. "Everyone must have thought, I want a sorcerer like that," said the German Archaeological Institute's Jutta Stroszeck. The number of curses found in Kerameikos that involve court battles increased in the second half of the fifth century B.C. "You can't draw a direct line with the Thucydides incident, but it's probable," she said.



BUST OF PERICLES ROMAN COPY OF A GREEK ORIGINAL. BRITISH MUSEUM, LONDON

DEA/G. NIMATALLAH/ AGE FOTOSTOCK

Lakshmi Bai, Freedom Fighter of India

In 1858 Lakshmi Bai, ruler of Jhansi in northern India, took on the mighty British East India Company to save her kingdom. Her valor made her an enduring national legend.

Rebel Queen of Jhansi

circa 1827

Manikarnika is born to a Brahman family in a city on the banks of the Ganges in Uttar Pradesh.

1842

She marries the maharaja of Jhansi and changes her name to Lakshmi Bai. The two will have a son, who survives only a few months.

1853

The maharaja dies, and Lakshmi Bai becomes regent for her adopted son. The East India Company rejects their claim to the throne of Jhansi.

1857

The Indian Rebellion breaks out against British rule and begins to spread across the nation.

1858

Lakshmi Bai joins the fight and leads troops against the British. She dies in combat on June 17.

There is something of the Cinderella story to Lakshmi Bai, a commoner who rose to become rani (queen) of Jhansi, a princely state in mid-19th century India. Most fairy tales would end there, but in Lakshmi Bai's case it was just the beginning of a remarkable life as a warrior queen.

After becoming regent at the age of 25 in 1853, she would find herself at the heart of the Indian Rebellion that broke out in 1857, now known by many historians as India's First War of Independence. Ultimately, she would lead thousands of infantry and cavalry troops into battle against the British, reportedly fighting with a sword in each hand and her horse's reins between her teeth.

History and myth are inseparable in her story. In the end, Lakshmi Bai, the rani of Jhansi, would lose her kingdom and die in battle but become an inspiring symbol to the anti-colonial struggle that culminated in Indian independence 90 years later.

Rebel Regent

Lakshmi Bai was born around 1827 in present-day Varanasi in northeast India. Named Manikarnika, she was the daughter of a Brahman who worked as an adviser to the court of the peshwa, or prime minister, of the Maratha Empire, Baji Rao II. Though not aristocratic, Brahmans belonged to a higher caste of priests and scholars. When Manikarnika was four, her mother died, and she moved to court with her father. The peshwa raised her like his own; she received an education unlike most girls and trained with the boys in martial arts, fencing, and riding.

In 1842 the young Manikarnika married the much older Gangadhar Rao, the maharaja, or king, of Jhansi. After the wedding, she changed her name to Lakshmi Bai in honor of Lakshmi, the Hindu goddess of wealth and good fortune. The couple did not find fortune in starting a family, however, and their biological son died when he was only a few months old. In 1853 the maharaja became ill. Following Hindu tradition, the couple adopted a five-year-old boy named Damodar Rao, the son of a relative, and declared him to be heir to the Jhansi throne. The maharaja then instructed that Lakshmi Bai would rule as regent until the boy came of age. Shortly after the adoption, Lakshmi became a widow.

THE GODDESS DURGA. 12TH-CENTURY INDIAN RELIEF

BRIDGEMAN/ACI

The queen was renamed Lakshmi Bai for the Hindu goddess of wealth. Lakshmi formed a triad with Durga (courage) and Saraswati (knowledge).

FACE OF THE QUEEN

JOHN LANG, an Australian lawyer, represented Lakshmi Bai in her legal battle against the East India Company to stop the annexation of Jhansi. In his memoir, *Wanderings in India,* he describes seeing the rani for the first time: "She was a woman of about the middle size—rather stout, but not too stout. Her face must have been very handsome when she was younger, and even now it had many charms . . . The expression was also very good, and very intelligent. The eyes were particularly fine, and the nose very delicately shaped. She was not very fair, though she was far from black . . . Her dress was a plain white muslin, so fine in texture . . . that the outline of her figure was plainly discernible—and a remarkably fine figure she had."

LAKSHMI BAI, QUEEN OF JHANSI, ON HORSEBACK. 19TH-CENTURY COLOR ENGRAVING, KOLKATA
ALAMY/ACI

The East India Company, seeking to replace the Indian aristocracy with British officials and expand the British Empire, had a ploy to exploit such situations: the doctrine of lapse, a policy that gave the corporation the right to annex any kingdom whose ruler did not have a natural-born male heir. Lakshmi Bai was offered an annuity of 60,000 rupees in compensation for her departure, which the young queen refused, declaring, "I will not give up my Jhansi."

Revolt of the Sepoys

As she took control of her kingdom and organized her forces to fight the colonialists, a revolt by Indian soldiers, or sepoys, in the company's army, which began to the north in Meerut, caught fire. Rather than a single cause, the revolt had been stoked by an accumulation of grievances over what was seen as a British attempt to undermine traditional Indian society and religion.

The spark that lit the fuse was provided by rifle cartridges allegedly greased with pig and cow fat, which the sepoys had to tear open with their teeth before loading. Consuming pork and beef violates dietary laws of Muslims and Hindus, respectively. Although there is no evidence that either material was, in fact, used, the company had upset religious sensibilities on previous occasions. It had abolished sati in 1829, the Hindu custom of burning widows alive with the corpses of their husbands. The company had supported Christian missionary activity for decades, while an 1850 law allowed

INDIAN REBELS MASSACRE A GROUP OF BRITISH OFFICERS AND THEIR FAMILIES IN JHANSI, 1857, IN THIS 19TH-CENTURY ENGRAVING.
GRANGER/ACI

converts to Christianity to inherit ancestral property, which effectively promoted Christianity over the Hindu faith.

Sati was supported by some conservative, upper-caste Hindus as a path for widows to show full devotion to their deceased husbands. However, Lakshmi Bai's decision not to carry out the practice would not necessarily have been seen as inappropriate by all Hindus. According to Harleen Singh, author of *The Rani of Jhansi: Gender, History, and Fable in India,* "[s]ati was not a Hindu tradition expected of every widow, it had immense regional and class variance." As a queen, it would have been acceptable that Lakshmi Bai serve as regent to the adopted heir.

THE REAL RANI?

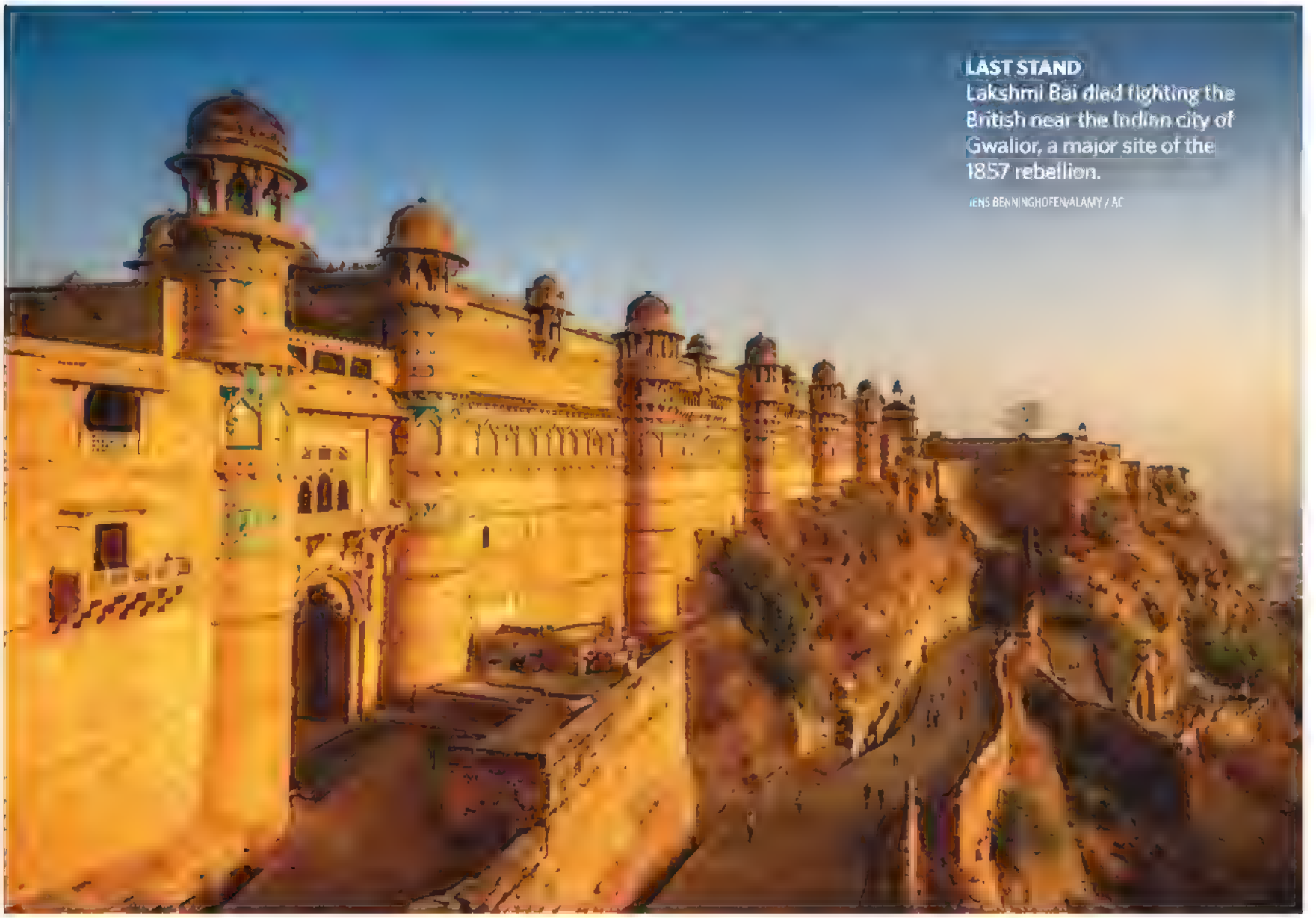
PHOTOGRAPHS said to be of Lakshmi Bai circulate in India. One (right) is alleged to be her in her royal regalia, taken around 1850 when she was in her early 20s. Indian scholars have cast doubt on its authenticity because she was not yet regent then, and photography was still very rare in that era of history.

AKG/ALBUM

Rani's Rebellion

Competing narratives have characterized Lakshmi Bai's biography—she is a hero to the Indians and was a villain to the British (some called her the "Jezebel of India"). These interpretations stem mostly from the events of June 1857 when more than 60 English residents, mostly women and children, were massacred in Jhansi by rebel sepoys who had traveled south. In two letters to a British official after the mutineers moved on, Lakshmi Bai denied involvement in the attack, saying that the sepoys did not answer to her, and she hoped they would "go straight to hell for their deeds." The East India Company refused to believe the rani had no hand in the tragedy.

Lakshmi Bai's hold on power in Jhansi lasted until March 1858, when company troops led by Gen. Hugh Rose laid siege to the fortress. The rani rallied her defenders to hold out against a relentless bombardment, returning fire with heavy guns of



LAST STAND
Lakshmi Bai died fighting the British near the Indian city of Gwalior, a major site of the 1857 rebellion.

JENS BENNINGHOFEN/ALAMY / AC

their own and rebuilding walls, but after two weeks the British broke through.

The rani escaped under the cover of darkness, accompanied by her guards and, it is said, her son strapped to her back. In early April, as the British troops moved in to take the city, one soldier records that he was told to "spare nobody over 16, except women of course." The British troops duly behaved murderously in Jhansi, with the death toll reaching as many as 5,000 people.

Linking up with other rebel leaders, Lakshmi Bai occupied the town of Kalpi, but ultimately failed to hold it. Her forces then mounted a successful assault on the city-fortress of Gwalior. After this lone victory, she led her troops on a march east to confront a British counterattack led by General Rose. Here she met her end, and the rebels were defeated.

According to a report found among the papers of Lord Canning, India's governor-general at the time, the rani, who "used to dress like a man (with a turban) and rode like one" was shot in the back by a trooper of the Eighth Hussars. When she turned to fire back, he ran her through with his sword and killed her. General Rose would later pay homage to his adversary, noting that "[t]he Indian Mutiny had produced but one man, and that man was a woman."

Inspiration for India

The rani's adopted son, Damodar Rao—whose right to the throne of Jhansi had fueled his mother's decision to fight the British—fled with his guardians. In his memoir, Damodar Rao describes years of great suffering as he and his protectors struggled through a landscape of jungle and ravines. Some took pity on the fugitives; others refused them help for fear of reprisals from the British. Eventually Damodar Rao surrendered to the authorities, who granted him a small pension. He lived out his days in penury and died in obscurity. His descendants have never received government recognition as members of the rani of Jhansi's family.

The Indian Rebellion of 1857 was the beginning of a much larger struggle that would last for nearly a century. In the early 1940s the Indian National Army took up the fight. Among its ranks was an all-female corps called the Rani of Jhansi Regiment, named in honor of Lakshmi Bai and composed of young women determined to fight for freedom.

After India achieved independence in 1947, Lakshmi Bai's legacy continued to flourish. Indian poet Subhadra Kumari Chauhan penned "Jhansi Ki Rani," a poem in Lakshmi Bai's honor, which is taught to schoolchildren all over India to this day. Translated from Hindi, it features this refrain: "This story we heard from the mouths of Bundel bards / Like a man she fought, she was the Queen of Jhansi."

—Alessandra Pagano

Death Train Out of London

As London ran out of burial space in the 1800s, Victorian entrepreneurs funded what they thought would be a profitable enterprise: a railway for the dead.

In the mid-1800s London was about to burst. As young ruralists chased new opportunities in industrial jobs, the city's population more than doubled in the first half of the 19th century. Residents of what was then the world's largest city were crammed into ever more crowded quarters. Suffocating smoke swelled from the sooty factory chimneys and hung in the air like a shroud. Horse manure coated the streets, and human sewage amassed in the River Thames.

In shadowy parallel to the city's living conditions, London's dead were also being crowded. The city's graveyards were overflowing. Small church graveyards had been the primary place for interring London's dead for centuries. As the city's population skyrocketed, these places proved woefully inadequate at supporting the new population. Graves were dug too shallowly and too close together. Hard rains exposed grim scenes of decomposition.

In the 1830s Parliament was moved to intervene. The city's first large, privately run cemeteries were granted licenses to operate on what were then the outskirts of London. Planned as parklike gardens, spacious and meticulously manicured, these new cemeteries were dubbed the "Magnificent Seven." The burial sites were costly, so these new sites only staved off the crisis for those who could afford it.

Business of Death

As industrialization created both London's population boom and its corresponding burial problems, two entrepreneurs, Richard Broun and Richard Sprye, believed they had found an answer to the shortage of cemetery space in a new industrial invention: the railroad. They believed this new form of transportation could be the solution for the masses, not just the wealthy.

According to a *Dictionary of National Biography* article published shortly after his death, Broun had a reputation for being "busily engaged in the projection of a number of schemes, most of them of a somewhat fantastic nature" and promoting them wildly with pamphlets and letters. Together with Sprye, a lawyer who appears to have spent some time in debtor's prison, they drew up plans for a graveyard so massive they claimed it could hold the remains of all Londoners, forever.

THE ENTRANCE to the necropolis railway at Waterloo Station in London, photographed in the 1890s, which began operating in 1854.

SCIENCE & SOCIETY PICTURE LIBRARY/GETTY

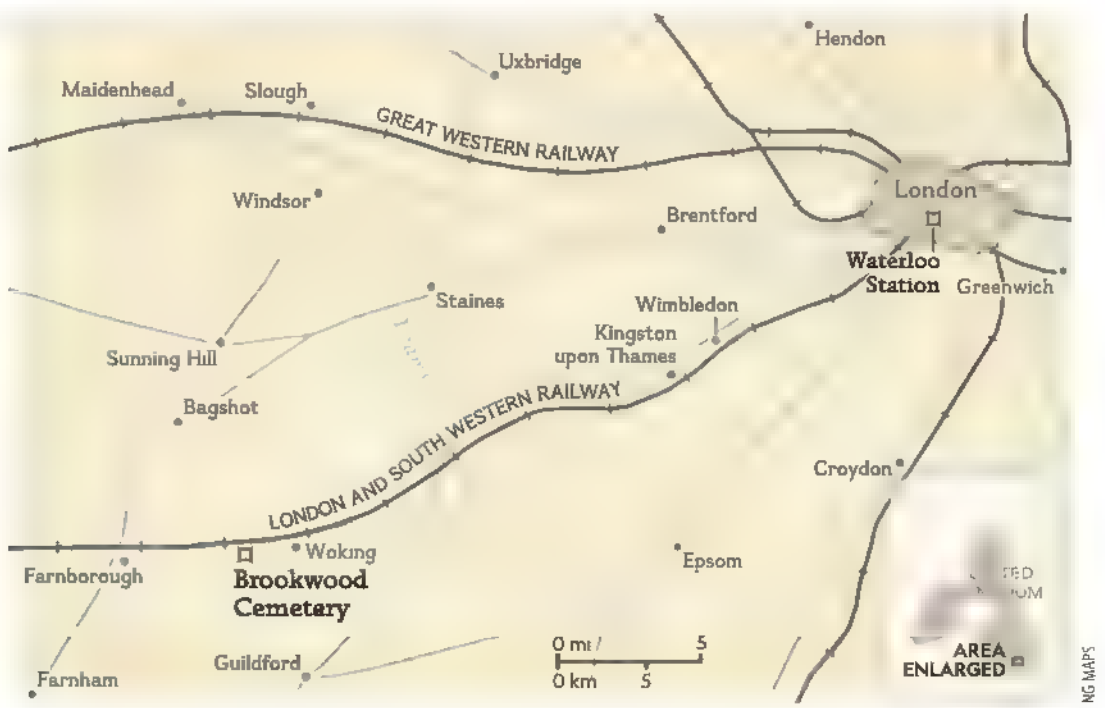
A CLASS ACT

BROOKWOOD CEMETERY catered for the dead of London's less well-off, in contrast to the city's Magnificent Seven cemeteries, which served the wealthy and where elaborate tombs were common, such as the one (right) in Kensal Green Cemetery of Sir William Casement (d. 1844), a British administrator in India.

FRÉDÉRIC SOLTAN/GETTY

They would build the graveyard far outside the city, buffering it from the encroachment of a metropolis that was rapidly gobbling up its surroundings. To travel to the distant graveyard, a speedy, affordable railroad would bring mourners—and coffins—from London.

The London Necropolis and National Mausoleum Company was formed in 1852 and embarked on constructing a nearly 500-acre cemetery 23 miles southwest of London in Woking, Surrey. A series of ill-documented agreements and internal disputes shut Broun and Sprye out, leaving them without a penny as the trustees of the company charged on without them.



END OF THE LINE

ON LEAVING Waterloo Station, the trains of the London Necropolis and National Mausoleum Company traveled 23 miles to Brookwood almost entirely on existing railroad and were then diverted to the cemetery by a specially built branch line. The Brookwood Cemetery's two stations—the South Station serving members of the Church of England, and the North Station serving "nonconformists" who were non-Anglicans—reflected conventional railway architecture of the period. Initially, these were temporary structures to be replaced by more elaborate buildings later. Since the venture was never as profitable as planned, the new buildings never materialized. Both stations have since been demolished.

THE NORTH STATION AT BROOKWOOD CEMETERY, SURREY, ENGLAND, ON A POSTCARD FROM 1911
GIBSON GREEN/ALAMY

For the Masses

In 1854 the London Necropolis Company opened what was then the world's largest graveyard. They called it Brookwood Cemetery. Reflecting trends deployed at London's still new Magnificent Seven cemeteries, Brookwood's advertisements lauded its "trees, flowers and winding paths diversifying the view" and grounds "laid out with the utmost regard for order." Its location meant Brookwood provided an escape. Lanes were lined with American redwoods. Visitors could get lost in the vastness of the graveyard's 500 acres.

THE SEAL OF THE LONDON NECROPOLIS COMPANY. THE MOTTO MEANS "A PEACEFUL DEATH, A GOOD LIFE." ILLUSTRATION BY JOHN CLARKE

There was a key difference between Brookwood and those grand London funerary estates: the cost. The distant memorial space was far more accessible to London's working masses than the grand, urban cemeteries. The railroad journey to Brookwood was much faster—and significantly cheaper—than a horse-drawn hearse ride to the edge of town. Burial plots in Brookwood were more affordable than their urban counterparts. Thanks to the railroad, mourning in the comfort of nature was no longer a luxury reserved for London's elite.

For the dead headed to eternal repose at Brookwood, the process was fairly simple. The coffin was hauled from the place of death (typically via a short horse-drawn hearse ride) and loaded into the shared storage vault beneath the arched entryway of the company's private terminus at London's Waterloo Station. Funeral parties gathered in the morning, dressed in black and perhaps clutching their invitations that bore the name of the deceased alongside the train's departure and return times. Bodies were loaded into dedicated railcars. Mourners bought their discounted rail tickets and stepped into separate passenger cars. Each morning, the funeral train would depart Waterloo, make its solemn journey to the cemetery, and return in the afternoon.

The deceased's religion determined where their final journey would end. Once inside the cemetery, the train chugged into two stations: one for members of the Church of England and the other for "nonconformists." The cemetery station buildings often served as the waiting room, the funeral reception area, the living quarters for cemetery employees, and, strategically, the showroom where visitors

BROOKWOOD is still in operation and remains the largest cemetery in the United Kingdom. Today, South Western Railway trains can take visitors there from London.

KATIE THORNTON

could peruse an assortment of made-on-site headstones.

It wasn't all doom and gloom in these stations. They also housed their own pubs. (It's unclear if the signs declaring "Spirits served here" were intended to be a point of levity.) The daughter of one of the cemetery's staff recalled, years later: "In addition to catering for mourners, who mostly came down from London by train, we also had local people who walked through the cemetery calling in for afternoon tea. Of course the bar was an added attraction, as it had a full license and kept to pub opening hours, much to the delight of the locals."

The Decline

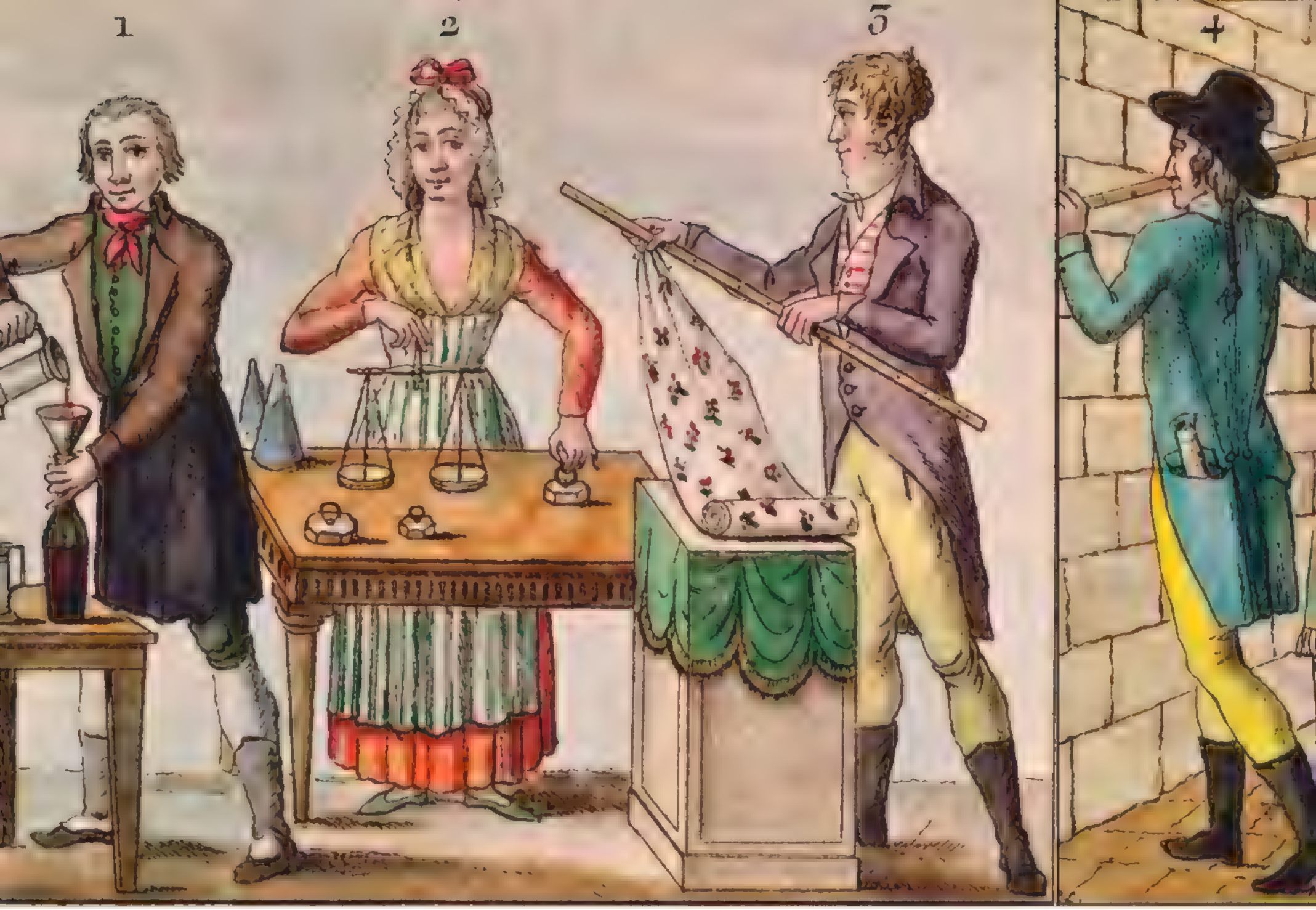
The cemetery-railway partnership was never as successful as planned. In their early estimations, Broun and Sprye planned to take in 50,000 bodies a year, but in the first 20 years of operation, that annual number only averaged about 3,200. And after a hundred years of operation, the cemetery was home to just 216,390 permanent residents. The founders' goal had been five million.

Throughout the second half of the 19th century, Parliament passed a series of laws that cleaned up inner-city graveyards and required local governments to provide burial grounds as a public service. In the 1900s cremation grew in popularity, and motor hearses made trekking to suburban cemeteries more affordable.

All of this meant that demand for the funeral train fell. The railway operators grew frustrated when golfers, dressed as mourners, repeatedly used the coffin train to get to a nearby golf course on the cheap. There were even accounts of funeral directors having a bit too much spirit at the graveyard pubs. By the 1930s the trains rarely ran more than twice a week.

A nail in the coffin for the Necropolis Railway was the 1941 bombing of Waterloo Station, which led to the permanent closure of the venture. At Brookwood, the company sold off unused parcels of land to stay afloat. The train tracks were removed, making way for walkers and automobiles (though the cemetery station's pub hung on for many years). After a period of near abandonment in the 1970s, the cemetery managed to bounce back from moribundity and now conducts burials. Today, a small section of railroad tracks, a memorial plaque, and a cemetery street called Railway Avenue hold the history of the once trailblazing scheme.

—Katie Thornton



Revolutionary Measures

As the French Revolution raged in the 1790s, French scientists were replacing the country's assorted weights and measures with one unified system. They succeeded, but it would take years of political upheaval before the French learned to embrace the meter.

Mathematician and author, the Marquis de Condorcet (1743–1794) was an aristocrat who nevertheless embraced the early stage of the French Revolution. Even as the Jacobins hunted him down during the Reign of Terror—he was a moderate and opposed putting King Louis XVI to death—he wrote the *Sketch for a Historical Picture of the Progress of the Human Mind,* expressing his faith in a future guided by science and reason. Two days after his arrest, he killed himself in prison rather than face execution.

Condorcet's ideals live on, however, in the way most of the world measures things: the metric system. He believed a universal and standard system would allow people to calculate their own best interests, "without which they cannot be really equal in rights . . . nor really free."

Order From Chaos

At the time of the French Revolution in 1789, Paris was the global capital of science, whose leading lights, the *savants* (wise ones), made lasting contributions to physics, chemistry, and biology.

The early stages of the revolution famously abolished the last vestiges of feudalism in France. It also ended the right of the nobility to control the weights and measures used in their fiefdoms.

CITIZENS USE France's new metric measures in this detail of a 1795 color engraving. Carnavalet Museum, Paris

BRIDGEMAN/ACI

A FRENCH REPUBLICAN CALENDAR OF 1793-94, WITH AN ALLEGORY OF JUSTICE

MARKING TIME

FRENCH REVOLUTIONARIES not only reformed their government; they also remade their calendars. In October 1793 they replaced the Gregorian calendar with their republican calendar (which would stay in use until late 1805). The old months were replaced by ones with names to describe the natural phenomenon from that time of year: A period between *avril* (April) and *mai* (May) became "Floréal" for blooming flowers. "Vendémiaire" was the autumnal month of vintage, when grapes were harvested for wine.

As elsewhere in Europe, the old weights and measures originated in a system used by the Romans. Over the centuries since Rome's fall, it had broken down into myriad local systems across France. The savants faced reforming a patchwork of up to 800 different units of measurement, from the *toise* to the *lieue* and the *quart* to the *pinte*. Some measures were extremely basic: In early 18th-century Bordeaux, a unit of land was defined by how far a man's voice carried. There was little or no standardization: In Paris, a pinte was the equivalent of 0.93 liters; in Saint-Denis, it was 1.46. An *aune*, used to measure cloth, was based on the width of local looms. It was little wonder that this chaotic system was prone to fraud and stifled domestic and foreign trade.

An early proposal was to impose the Parisian measures on the rest of the nation. But for the savants, this approach seemed an arbitrary, unscientific baseline. The diplomat Charles-Maurice de Talleyrand-Périgord then proposed that an unchanging standard from nature should provide the basic unit of measurement, which he hoped would be adopted by other nations and harmonize international trade. The National Assembly agreed and asked the Academy of Sciences, led by Condorcet, to form a commission to select a new basic unit of measurement. The republican government promised the people of France "one law, one weight, and one measure," a goal that would take 10 years to be approved and even longer to be accepted.

The savants decided the new unit of measurement would be based on exact science.

A DETAIL FROM A 1794 EDITION OF THE FRENCH REPUBLICAN CALENDAR, FEATURING AN IDEALIZED FEMALE FIGURE WHO MEASURES THE WORLD

BRIDGEMAN/AGE FOTOSTOCK

New From Old

The savants eventually agreed that the various units of length, mass, and volume of the new system would all relate to each other. Each one could be divided and multiplied using a decimal scale.

This idea was, in itself, nothing new: Decimal-based systems had been used by the Romans, Indians, and Arabs. From the 14th century, economic and technical advances had made quantification more important, which led to using decimals

Meet the Meter

IN ORDER TO accustom the public to the new meter, the French government distributed leaflets, posters, and conversion tables. After 1796, engraved marble meter bars were installed in public places around Paris. Two are still in place today, but only one in its original location: 36 rue de Vaugirard, in front of the Palace of Luxembourg. In 1799 France's premier instrument maker, Étienne Lenoir, made the definitive meter in platinum, replacing a provisional standard made from copper. It remained in use as the definitive metric standard until replaced in 1878.

MARBLE METER BAR NEAR THE PALACE OF LUXEMBOURG, PARIS, IN A 19TH-CENTURY ENGRAVING BRIDGEMAN/ACI

for fractions, an idea put forward by the Flemish mathematician Simon Stevin. Nor was the concept of a universal measurement new, as it had already been proposed by Englishman John Wilkins in 1668. Wilkins proposed using a tiny section of the Earth's circumference as a standard for measuring lengths.

The commission settled on a short list of units, the most basic of which—in the category of distance—was the *mètre*, or meter (from the Greek word *metron* for "measure"). In 1790 the National Assembly and Louis XVI approved the new system.

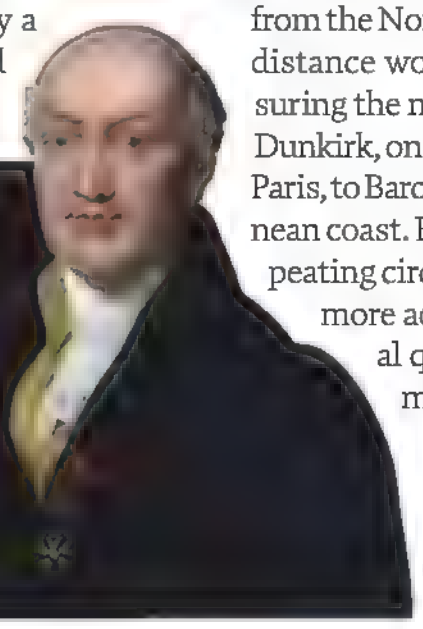
How Long Is a Meter?

The challenge to define the meter's length, was taken up by a group of distinguished scientists: Jean-Charles de Borda, Joseph-Louis Lagrange, Gaspard Monge, Pierre-Simon Laplace, and Condorcet.

After some discussion, the group adapted an idea proposed by Wilkins a century before—one meter would equal one ten-millionth of the distance from the North Pole to the Equator. The distance would be calibrated by measuring the meridian arc that runs from Dunkirk, on France's northern coast, via Paris, to Barcelona on Spain's Mediterranean coast. Borda's invention of the repeating circle, a surveying instrument more accurate than a conventional quadrant, made this option more desirable.

In 1792 astronomers Jean-Baptiste Delambre and Pierre Méchain began their measurements of the meridian. Chemist

INCALCULABLE HARDSHIPS



ASTRONOMERS Jean-Baptiste Delambre (right) and Pierre Méchain measured the Dunkirk-Barcelona meridian—on which the meter would be calculated—while suffering disease and the violence of the French Revolution. Factoring mountains into their calculations made their work even harder and the accuracy of their results all the more remarkable. ALBUM

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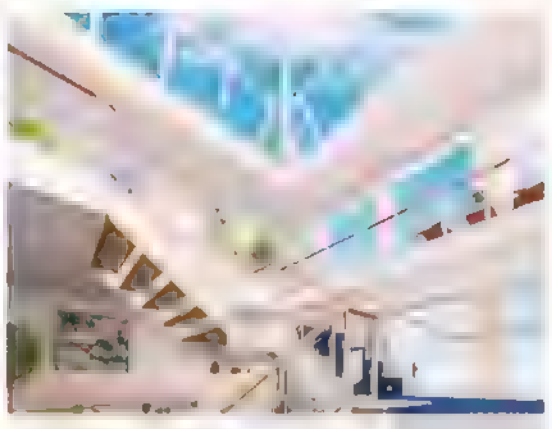

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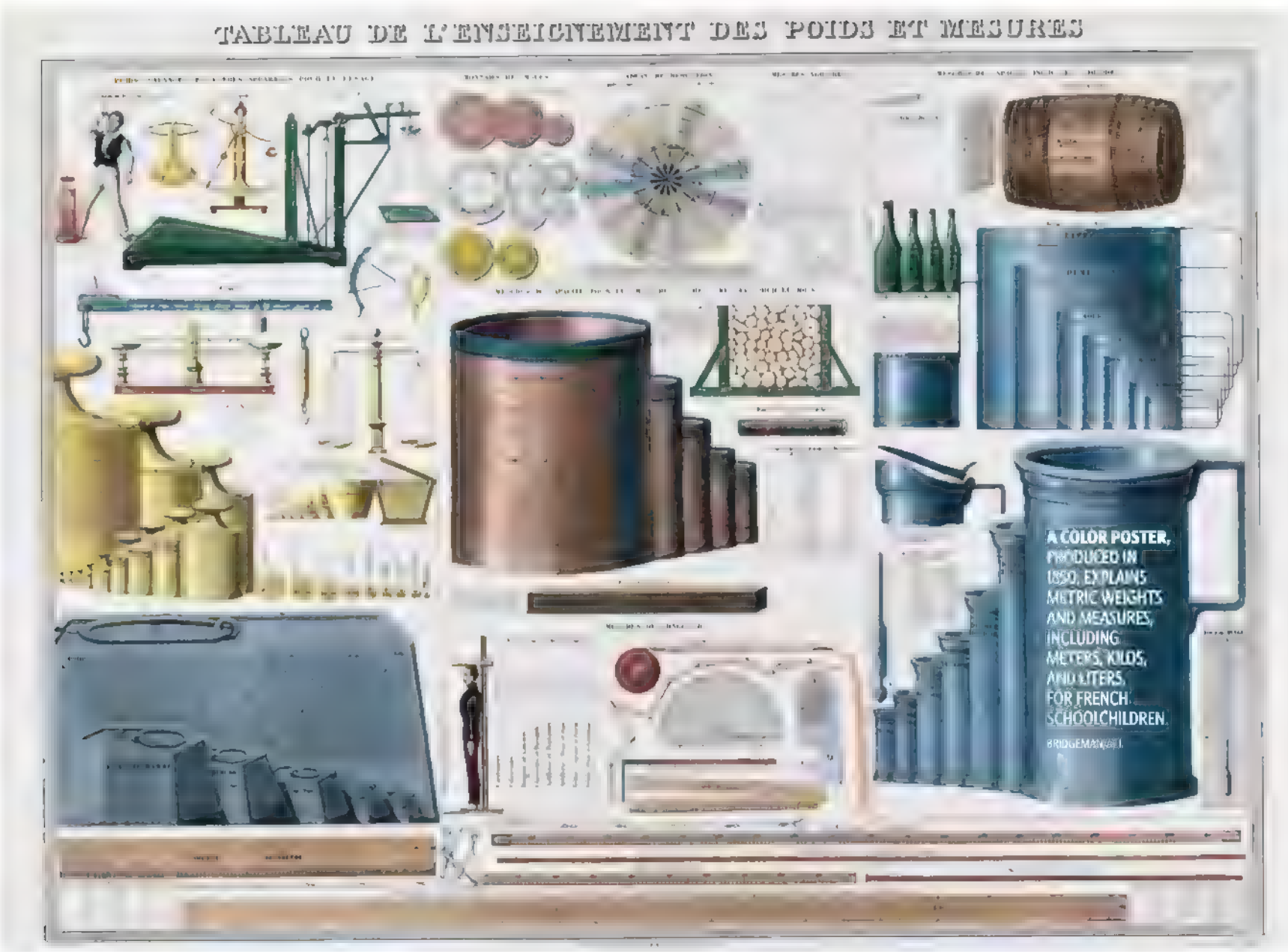

A COLOR POSTER, PRODUCED IN 1880, EXPLAINS METRIC WEIGHTS AND MEASURES, INCLUDING METERS, KILOS, AND LITERS, FOR FRENCH SCHOOLCHILDREN. BRIDGEMAN/ACI

Antoine-Laurent Lavoisier called the journey "the most important mission that any man has ever been charged with." After several years of work, they delivered their calculations (recent satellite surveys have affirmed their values were off, but not by very much).

Selling the System

By 1795 the savants had used this measurement as the foundation of a completely new system: The meter would be used for length, the gram for mass, and the liter for volume. The metric system was officially adopted in France on December 10, 1799. Government proclamation was one thing, but practical use was another. Many people preferred their old customs of measurement. Also, in computing prices of goods in the new way, sellers rounded up to their advantage, further damaging the reputation of the new system with the general public.

Napoleon Bonaparte, who took power in France in 1799, was ambivalent about the metric system, dismissing it as "tormenting the people with trivia." In 1812, as trading continued in the old units, he introduced the so-called *mesures usuelles* (customary measures), a compromise between the metric system and the traditional system. He lengthened, for example, the traditional toise by some 20 inches to make the new *toise usuelle* equal to two meters in the new metric system.

After Napoleon fell from power in spring 1814, the mesures usuelles technically remained in place, but the traditional measures from before the revolution came back into use. Meanwhile, though resisted in the land of its invention, the metric system gained adherents in other countries. By 1820 William I of Orange had declared the metric system official in the Netherlands, and when Belgium separated from the Netherlands 10 years later, it kept the new system of measurement. Luxembourg had also made the switch to metric.

In 1837, eager to co-opt the legacy of the revolution for his regime, the new king of France, Louis Philippe I, revoked the use of both the traditional measurements and the mesures usuelles and reinstated the metric system as part of a drive toward modernization.

Ultimately, it was not laws that would establish the meter as the standard measure across the world but the spread of education, science, transportation, and commerce. Today, two centuries after it was first implemented, only three countries have officially retained a non-metric system: Myanmar, Liberia, and the United States.

—Vladimir López

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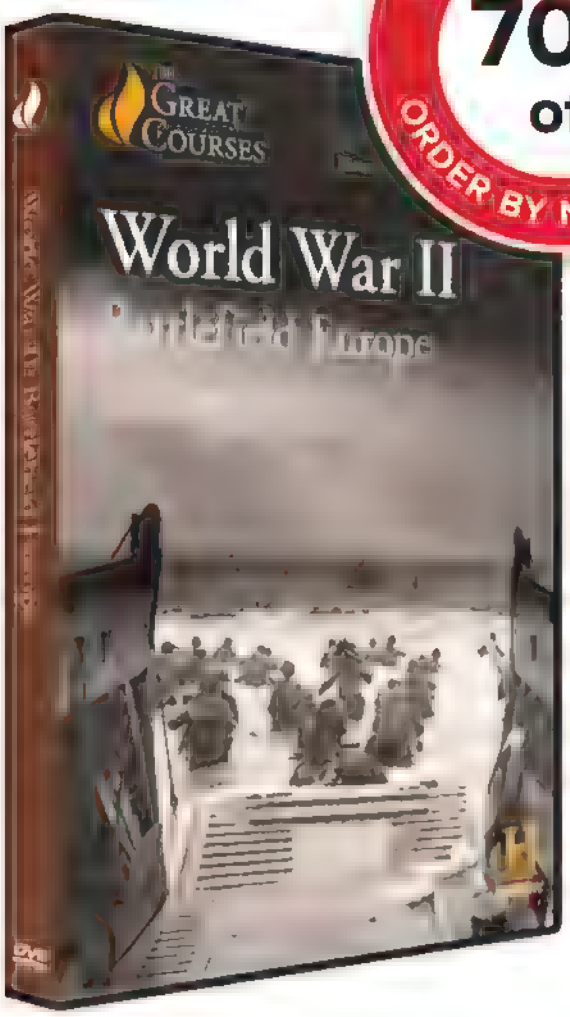

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EGYPTIAN POWER COUPLE

AMENHOTEP

For almost four decades, Amenhotep III and his great royal wife, Tiye,

TERESA ARMIJO

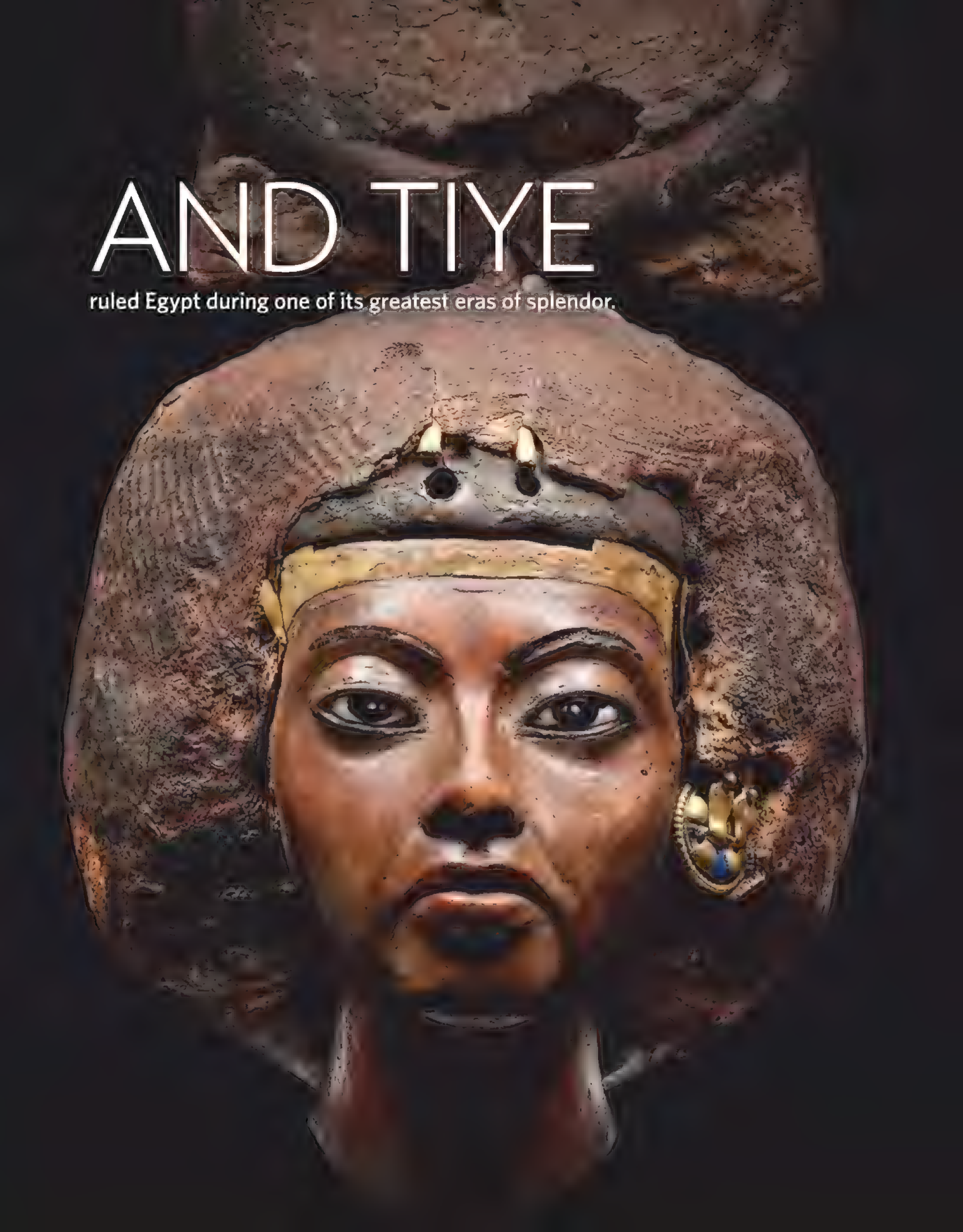
KING AND QUEEN

A portrait of the young Amenhotep III wearing a khepresh, also known as the blue crown. Egyptian Museum, Cairo. Opposite: Tiye's portrait was created after her husband's death and their son had inherited the throne. Egyptian Museum, Berlin

ARALDO DE LUCA; **OPPOSITE:** BPK/SCALA, FLORENCE

AND TIYE

ruled Egypt during one of its greatest eras of splendor.



AMENHOTEP III REPRESENTED IN THE FORM OF A SPHINX. FAIENCE FIGURINE. METROPOLITAN MUSEUM OF ART, NEW YORK
MET/BRIDGEMAN/ACI

The long reign of Amenhotep III and his great royal wife, Tiye, was a golden age for Egypt. Ruling together for as many as 38 years, the pair oversaw a vast and prosperous empire from circa 1391 to 1353 B.C. during Egypt's 18th dynasty. Wealth poured in from Nubia and the Levant, financing a new era of monument building and artistic expression.

Amenhotep III's reign is one of the best documented in ancient Egypt. His father, Thutmose IV, passed on to him a wealthy and expansive kingdom at the height of its power and influence. Amenhotep's empire would stretch 1,200 miles from the Euphrates in current-day Syria to the Fourth Cataract of the Nile in present-day Sudan. Early in his reign, Amenhotep waged successful military campaigns against Nubia, a land rich in gold; after claiming this new territory for Egypt, his reign was largely peaceful, allowing Egypt to grow rich and comfortable.

This placid reign would become a gift for today's archaeologists and historians because of the wealth of documents and records it left behind. The king's early years were documented through a series of soapstone scarabs that proclaimed Amenhotep's successes and milestones. During their reign, Amenhotep III and Tiye built as many as 250 massive structures: palaces, mortuary complexes, temples, and monuments, all decorated with timeless works of art that told the story of the king's reign. The king's three jubilee celebrations were documented in excruciating detail.

The royal pair also kept careful records of their interactions with foreign powers. Scholars look to the Armana Letters, a rich trove of correspondence detailing the negotiations and affairs between Egypt and its allies. With these detailed accounts, a picture of this time and place exists more clearly than of almost any other in ancient Egypt, and the lives of Tiye and Amenhotep can come into focus more than for any other pair of Egyptian royals.

Rise to the Throne

Ruling for about nine years, Pharaoh Thutmose IV secured valuable alliances that made Egypt wealthy before he passed away. Scholars disagree on Amenhotep III's exact age when he succeeded his father as pharaoh; many believe he was still a child, placing him sometime between seven and 12 years old. As the new pharaoh was so young, his mother, Thutmose IV's second wife Queen Mutemwiya, acted as regent. Later in his reign, Amenhotep would have the story of his divine conception carved into the walls at the temple of Luxor: The god Amun-Re, in the form of Pharaoh Thutmose IV, visits a sleeping Queen Mutemwiya. When she wakes, Amun-Re announces: "Amenhotep, governor of Thebes, is the name of the child that I have placed in your body. He will exercise royalty well throughout the country."

Archaeologists are fortunate to have many scarab amulets produced during Amenhotep's reign to commemorate special events. Carved from soapstone, many of these bug-shaped objects feature inscriptions that proclaim

A BEAUTIFUL PARTNERSHIP

ca 1400 B.C.

Prince Amenhotep is born to Pharaoh Thutmose IV and his minor wife Mutemwiya.

ca 1389 B.C.

Thutmose IV dies, and his heir Amenhotep becomes the ninth ruler of Egypt's 18th dynasty.

ca 1393 B.C.

By year two of his reign, Amenhotep marries Tiye, who will become his great royal wife. The two will have at least six children.

ca 1361 B.C.

The pharaoh and queen celebrate the first of three jubilees. Amenhotep symbolically marries his daughter Sitamun as part of the ritual.

ca 1353 B.C.

Amenhotep III dies, and his son Amenhotep becomes pharaoh. Queen Tiye will outlive her husband by at least a decade.

AMENHOTEP'S ACCOMPLISHMENTS

Amenhotep III's great temple of Luxor remains one of the best preserved and most admired temples in Egypt. Right: A commemorative stone scarab issued by Amenhotep III spread the news of his successful lion hunts. British Museum, London

FABRICE GATELOY/AGE FOTOSTOCK; **RIGHT:** RMN-GRAND PALAIS

AMENHOTEP III (CENTER) AND TIYE SIT AS TWO OF THEIR DAUGHTERS (RIGHT) SHAKE RATTLES. CARNELIAN PLAQUE. 18TH DYNASTY

QUINTLOX/A.BAM

Amenhotep III's great deeds and also provide insight into the milestones of his reign. More than 200 have been found in sites from all over the Egyptian empire. One set of amulets describes a successful wild bull hunt:

In the second year of the reign of His Majesty, the Living Horus, the mighty Bull, diademed with Maat, the [e]stablisher of Laws, the Pacifier of the Two Lands, Mighty one in arm (or, thigh), smiter of the Nomads, the son of Ra, Amenhetep, Governor of Thebes, giver of life (the King's Woman, the Great One, [being] Tiye, living one like Ra, a marvellous thing took place through His Majesty.

The vivid description of how the pharaoh and his army killed dozens of wild bulls sent not only a message of his prowess and strength, but also a subtle warning that the new king would put down any vassal state that tried to rebel.

Archaeologists have also used these scarabs to establish when Amenhotep and Tiye wed. Another series of amulets were created just to commemorate the event. Fifty-six have been recovered, and each one proclaims the royal match with joy and reverence. They name her father, Yuya, and mother, Tuya.

While scholars continue to debate the exact roles and origins of Tiye's parents, there is agreement that they were a noble family and that Tiye grew up at court. Betrothed to the king at a young age, Tiye had been well educated to prepare for life as a queen. She appears to have been a cultured person and owned her own library.

Amenhotep and Tiye's lifelong partnership produced at least six children: four daughters, Sitamun, Henuttaneb, Isis, and Nebetah; and two sons, Thutmose and Amenhotep. The marriage scarabs do not assign an exact year to the wedding, but the bull scarabs show that the couple were wed by Amenhotep's second year on the throne. They also show that shortly after the marriage, Tiye was named Great Royal Wife.

The Royal Wives Club

Egyptian pharaohs could take many wives, and their great royal wife was chief among them. Amenhotep did build a harem, but his relationship with Tiye was different from the start. Historians have found that she wielded great influence at court, unusual for a woman at that time.

KOHL JAR BEARING THE NAMES OF AMENHOTEP III AND TIYE. LOUVRE MUSEUM, PARIS

CHRISTIAN DECAMPS/RMN-GRAND PALAIS

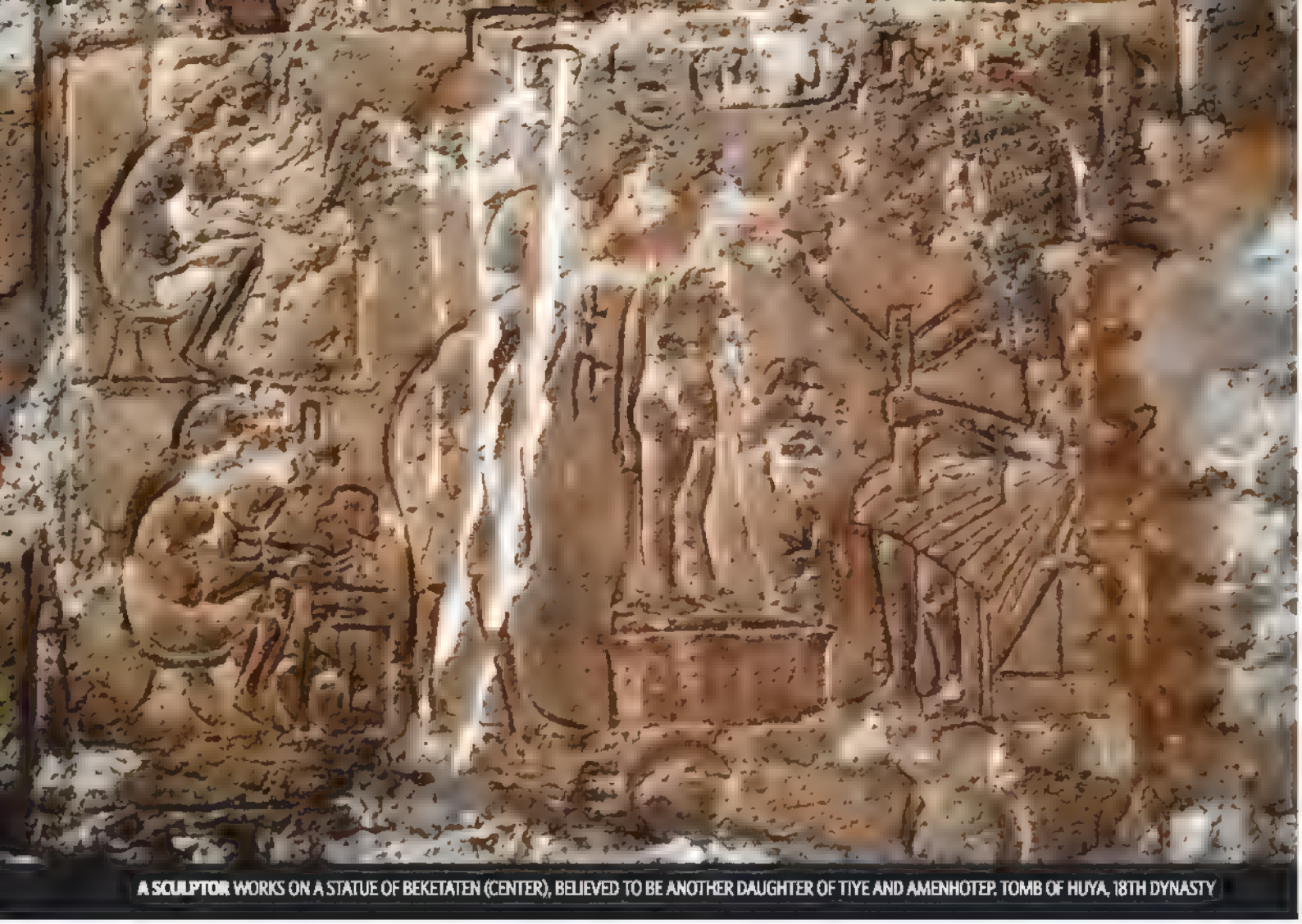
THE ROYAL FEMALE LINE

The daughters of Amenhotep and Tiye played an important role during the pharaoh's jubilee celebrations. The first was held around year 30 of his reign; his eldest daughter, Sitamun, married Amenhotep to become a daughter-wife and queen; her younger sister Isis seems to have done the same in the second jubilee around year 34.

Many Egyptologists think that these unions were purely symbolic, with no sexual relationship between parent and child. Almost all the evidence of these unions is related to the jubilees. It seems these marriages were part of the festival's complicated regenerative rituals.

The two daughters disappear from the historical record after their father's death, but their mother does not. Tiye took on the role of royal mother when her son Amenhotep IV became Pharaoh. She remains in his court after he changes his name to Akhenaten and revolutionizes Egyptian religion. Several murals from the Amarna tomb of her steward Huya depict Tiye enjoying a banquet with her granddaughters.

ROYAL SEAT
Found in the tomb of her grandparents in the Valley of the Kings, a wooden chair gilded with silver and gold features the name and depictions of Princess Sitamun seated on a throne (right) as a servant offers her gifts. Egyptian Museum, Cairo



A SCULPTOR WORKS ON A STATUE OF BEKETATEN (CENTER), BELIEVED TO BE ANOTHER DAUGHTER OF TIYE AND AMENHOTEP. TOMB OF HUYA, 18TH DYNASTY

UIG/A.BUM

Her name appeared on official acts, including the announcement of Amenhotep's marriage to a foreign princess.

By the 10th year of his reign, Amenhotep had repeatedly requested a daughter from the king of Mitanni, in northern Mesopotamia, and finally a princess was sent to Egypt loaded with gifts and a large entourage in train. To commemorate her arrival, another series of scarabs were issued, one of which read:

> *The Great Queen Tiye . . . marvels that were brought to his majesty the daughter of Sut-tarna, ruler of Naharin [Mitanni]. Giluk(h)epa and the chief ladies of her harem: 317 women.*

Queen Tiye announced the king's new wife, Gilukhepa. Although the pharaoh would go on to wed a princess from Arzawa, two from Babylon, and two more from Mitanni, they never achieved the status or power of Tiye. Often the names of these foreign princesses have been lost from the record, while the presence of Tiye the great royal wife is reiterated in the sources, leaving no doubt as to which woman held power over Egypt. A year after Gilukhepa's arrival, another scarab announced the important gift that the pharaoh had offered to his great royal wife, Tiye: a man-made lake built near her hometown:

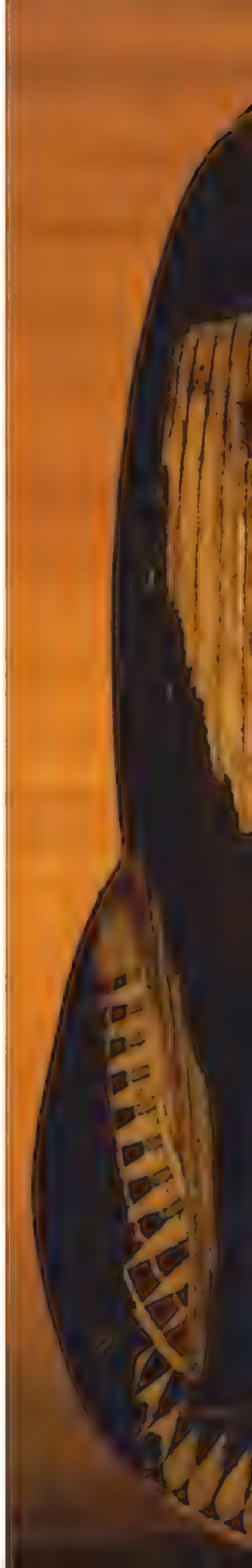
> *Amenhotep Ruler of Thebes given life, the great royal wife Tiye, may she live, whose father's name is Yuya and whose mother's name is Tuya. His majesty commanded the making of a basin for the great royal wife Tiye, may she live, in her town of Djarukha.*

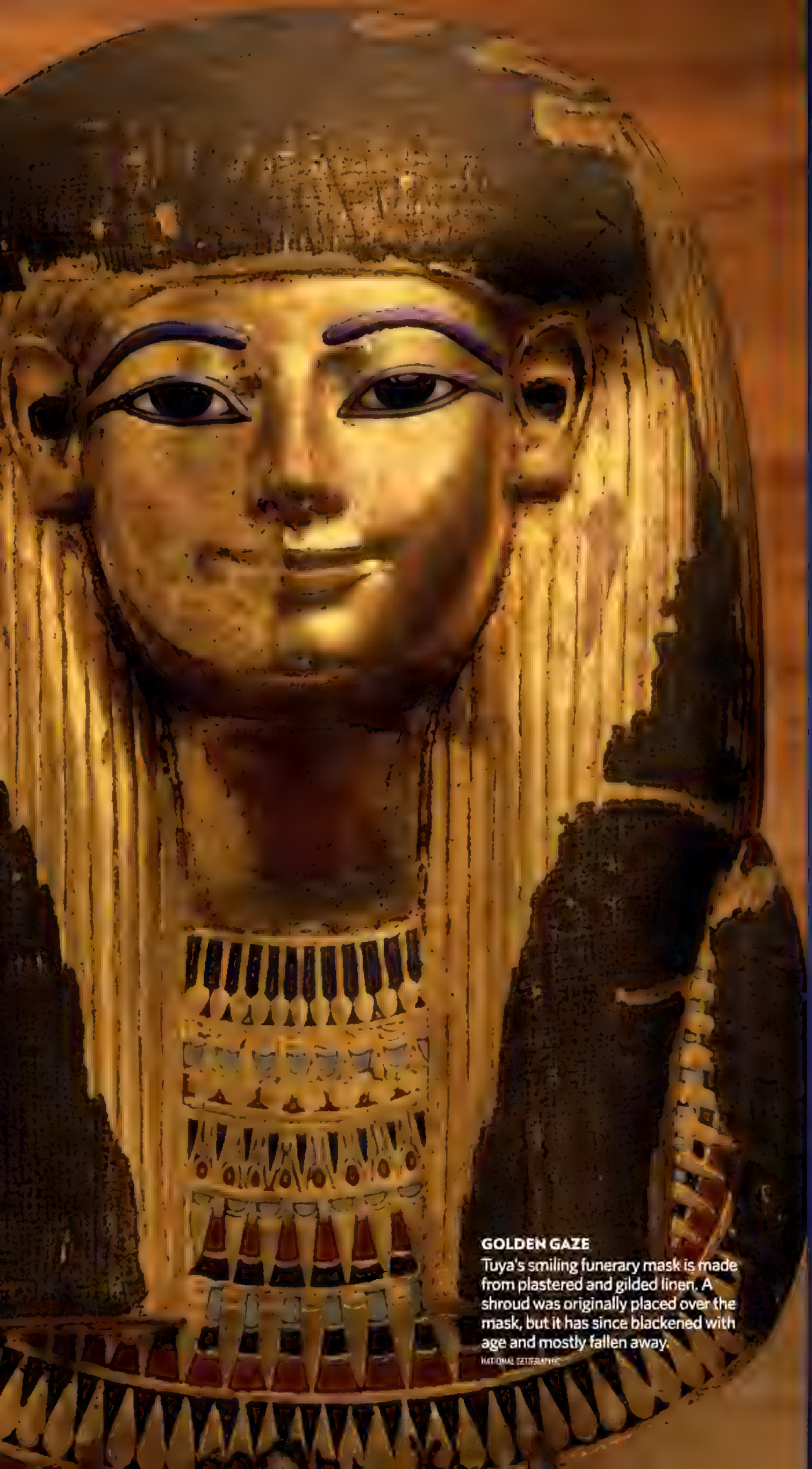
Power Sharing

Studying artworks created during Amenhotep's reign shows how Tiye's influence grew over the years. Early depictions show her as diminutive; in later portrayals, Tiye is taller and her attire more ornate. In statuary of the royal couple, she and Amenhotep are the same height, symbolizing a relationship of equals.

The pharaoh included his wife in government affairs, both domestic and international. Several seals, which were used to seal papyri, have been found bearing her royal cartouche. Historians studying the Amarna Letters, a collection of correspondence between Egyptian leaders and allies, have found foreign leaders mentioning

AMARNA LETTER. CORRESPONDENCE BETWEEN AMENHOTEP III AND TUSHRATTA, KING OF MITANNI
BRITISH MUSEUM/SCALA, FLORENCE





GOLDEN GAZE
Tuya's smiling funerary mask is made from plastered and gilded linen. A shroud was originally placed over the mask, but it has since blackened with age and mostly fallen away.
NATIONAL GEOGRAPHIC

FAMILY TREE

PARENTS OF THE QUEEN

KV46, the resting place of Queen Tiye's parents, was the best preserved tomb found prior to the discovery of the tomb of King Tutankhamun. Found by James Quibell in 1905, Tuya and Yuya's tomb had been looted as many as three times in the distant past. Grave robbers stole portable objects, such as oils and jewelry, but left behind larger items: gilded furniture, golden coffins, and the mummies inside.

Tuya and Yuya were probably in their 50s or 60s when they died and were buried in the Valley of the Kings. Scholars first used inscriptions on their funereal goods to identify them. Hieroglyphs spell out their names and trumpet their titles. Yuya's titles included Divine Father, Priest of Min, Commander of Chariots, and Chief of Horses. Tuya also held important positions, including Supervisor of the Harems of Amun in Thebes and of Min in Akhmim.

Recent DNA analysis confirmed the identities and lineages of both Yuya and Tuya. A study in the *Journal of the American Medical Association* confirmed that they were great-grandparents to King Tut.

TEMPLES IN THE SOUTH

Amenhotep III's sandstone temple in Soleb in Nubia (present-day Sudan) was the southernmost sanctuary of all those built by the pharaoh. He built a similar temple dedicated to Queen Tiye in Sedeinga, also in Nubia.

PANTHER MEDIA GMBH/ALAMY/ACI

A PROCESSION BEARS FIGURES OF AMENHOTEP III AND QUEEN TIYE ON SLEDS. TOMB OF THE PRIEST AMENEMINET, 18TH DYNASTY

AKG/ALBUM

Queen Tiye by name and recognizing her skill and intellect. The queen's writing demonstrates that she may have studied foreign languages; her correspondence with King Tushratta of Mitanni seems to indicate that she knew Akkadian.

Over the course of his 38-year reign, Amenhotep celebrated three jubilees and made Tiye a participant in these rituals, which scholars believe represented the unification of Egypt and served to empower the rulers. Tiye was the first queen to participate in these celebrations. From year 30 of Amenhotep's reign, the sculptures made of them together depict both as remarkably youthful, reflecting the miraculous rejuvenation thought to proceed from the jubilee.

Amenhotep and his queen's successful partnership provided a foundation upon which the pharaoh commissioned great monuments, temples, public parks, and palaces. Perhaps most magnificent was his funerary temple, built on the west bank of the Nile near Thebes (modern-day Luxor). Bigger than any other pharaoh's complex, little remains of the massive structure, which was damaged by an earthquake about a century after his death. Future pharaohs would rob the site of its statues and stones to build their own monuments, and floods from the Nile would further damage it. Two huge statues of Amenhotep III still sit at the site's old entrance, as archaeologists have begun new excavations to reveal the temple's previous splendor.

Death of the King and Queen

Amenhotep III died in 1353 B.C. and his tomb (now identified as WV22) is located in the Valley of the Kings. After his death, Tiye received letters from foreign rulers, such as Tushratta of Mitanni, expressing their condolences and securing their ties with the new monarch, Amenhotep IV, son of the late pharaoh and Tiye, who later changed his name to Akhenaten when he imposed religious reforms across Egypt.

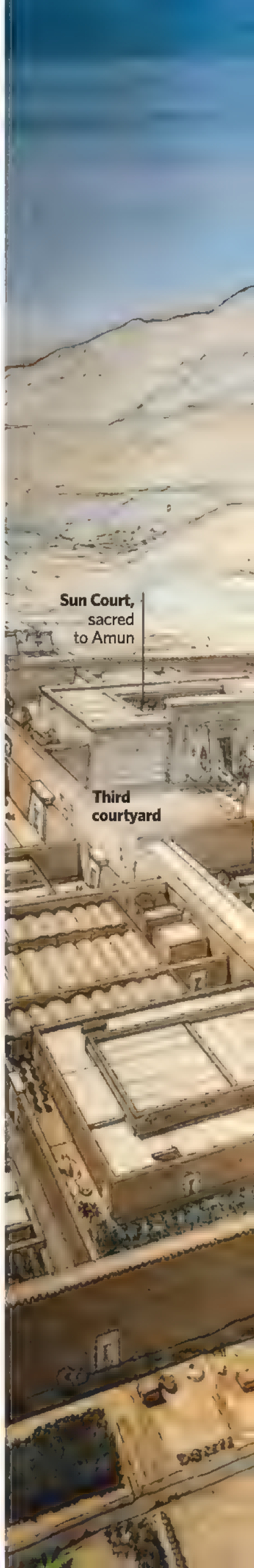
Tiye outlived her husband, but scholars don't know by how many years. Her tomb has not been identified, although her mummy and that of her husband have. Amenhotep's tomb was looted not long after his death, but priests relocated his mummy in antiquity to protect it from robbers. In 1898 scholars found the pharaoh's mummy hidden in KV35, the tomb of his grandfather Amenhotep II. Other royal mummies were hidden there, too, including an unidentified woman with flowing hair. Known until recently as the Elder Lady, the mummy has been confirmed through DNA analysis to be Queen Tiye, reunited in death with her husband.

A MEMBER OF THE EGYPT EXPLORATION SOCIETY, TERESA ARMIJO HAS WRITTEN EXTENSIVELY ON ANCIENT EGYPT'S FEMALE RULERS, INCLUDING NEFERTITI.

Learn more

BOOKS

Amenhotep III: Egypt's Radiant Pharaoh
Arielle P. Kozloff, Cambridge University Press, 2012



EXCAVATING THE PAST

PHARAOH'S TEMPLE FOR THE SUN

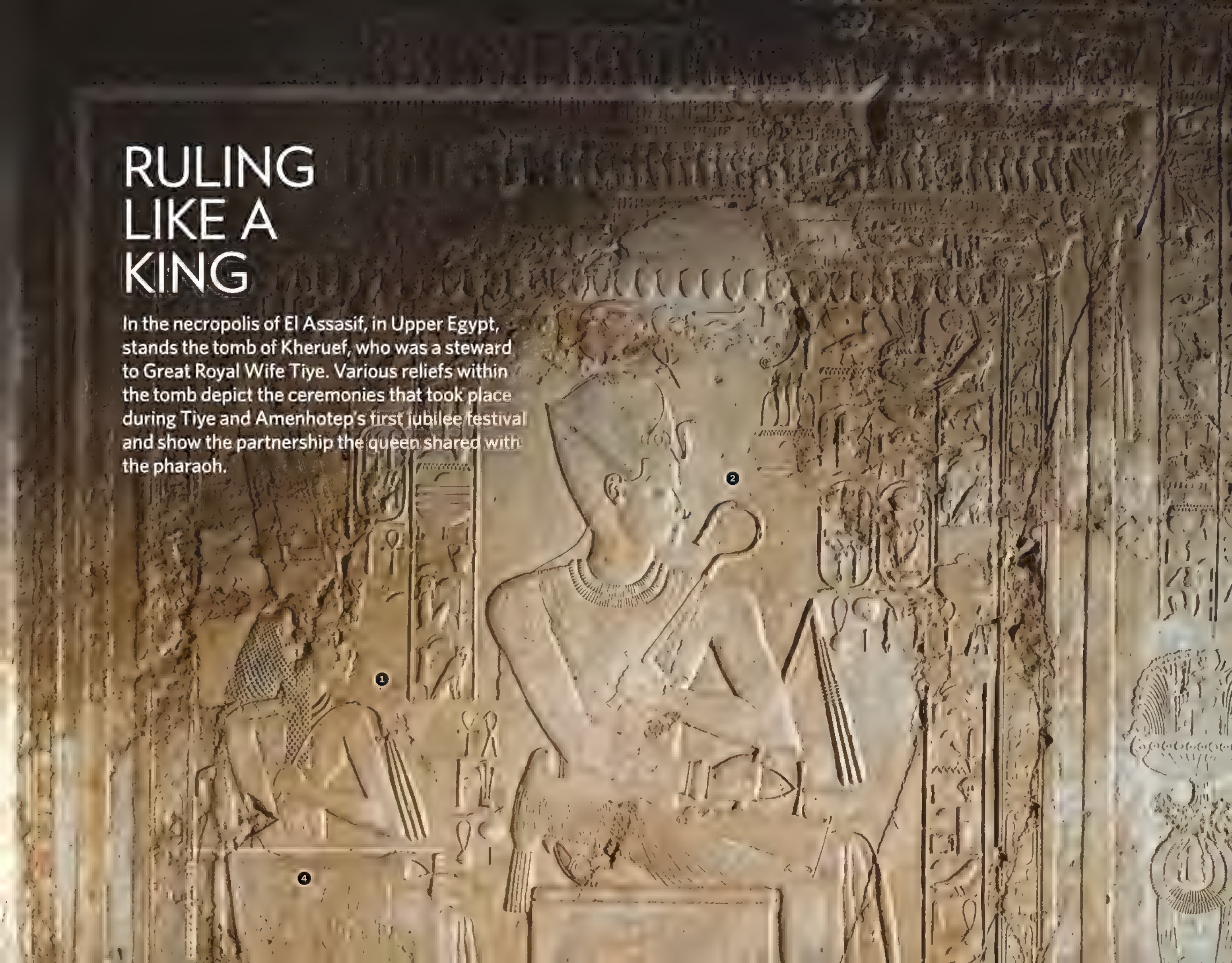
Today little is visible of the funerary temple built by Amenhotep III on the west bank of the Nile. Inscriptions say it was designed by the architect Amenhotep, son of Hapu, and constructed as a monument for the god Amun. To greet the sun god, the temple entrance faced east and was flanked by two colossal statues of Amenhotep III. Carved from single blocks of quartzite sandstone, these two giants are the most visible remnants of the complex's vast size and grandeur.

Archaeologists began new excavations at the site in 1998, led by Armenian Egyptologist Hourig Sourouzian. Her work has shown the rich detail still buried in the ground, including 72 statues of the lion-headed goddess Sekhmet and two more colossal statues of Amenhotep III.

More detailed reconstructions can now show the grand scale of Amenhotep III's original vision. A series of massive pylons and statues guided visitors through several courtyards to the so-called Sun Court and the sanctuary of Amun.

RULING LIKE A KING

In the necropolis of El Assasif, in Upper Egypt, stands the tomb of Kheruef, who was a steward to Great Royal Wife Tiye. Various reliefs within the tomb depict the ceremonies that took place during Tiye and Amenhotep's first jubilee festival and show the partnership the queen shared with the pharaoh.



A VICTORIOUS QUEEN

THE SHARED POWER between Tiye and her husband is depicted in a relief on the grave of Tiye's steward Kheruef in El Assasif, part of the Theban necropolis. ① Tiye appears next to ② the seated pharaoh on a raised platform; below are bound peoples of Egypt's conquered states. The image is intended to depict the supreme power of the pharaoh as monarch of the universe. On the lateral reliefs of ③ the queen's throne, two female prisoners are handcuffed to emphasize the queen's equality with her husband and their shared rule. Tiye even appears in the form of ④ a sphinx crushing the enemies of Egypt, a classic motif used to represent male rulers as triumphant.

ARALDO DE LUCA

LIFE STORY
Holding on to the branch of a sal tree, Maya (right) gives birth to Siddhartha Gautama, who will become the Buddha (left) in this second- or third-century A.D. relief from modern-day Pakistan, now in the Guimet Museum, France. **Opposite, below:** A fragment from the first-century A.D. Gandharan scrolls is among the oldest surviving Buddhist texts. British Library, London

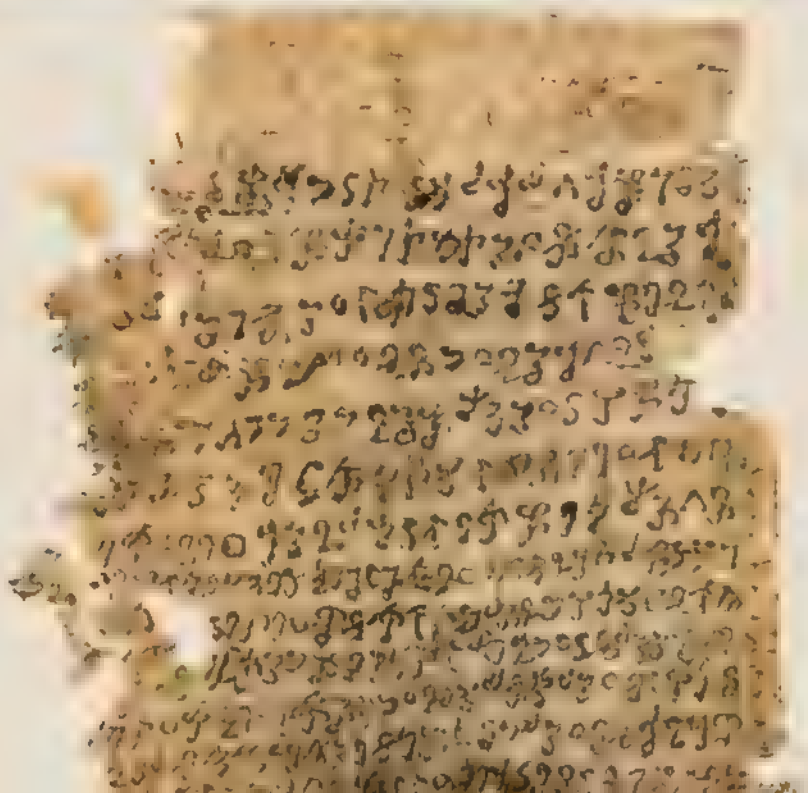
RELIEF: RICHARD LAMBERT/RMN-GRAND PALAIS SCROLL: BRITISH LIBRARY/ALBUM

LUMBINI

BIRTHPLACE OF THE BUDDHA

The influence of Siddhartha Gautama on the world is plain to see, but the facts about his life remain elusive. Archaeologists are exploring one of Buddhism's most sacred sites, his birthplace in Nepal, for more insight into the life and times of the Buddha.

VERONICA WALKER



RUINS OF KAPILAVASTU, NEPAL, THE CITY IDENTIFIED AS WHERE SIDDHARTHA GAUTAMA GREW UP
LEONID PLOTKIN/ALAMY/CORDON PRESS

Many centuries ago, a wealthy man from Kapilavastu (in today's Nepal), left behind his family and his wealth to seek a different way. He set out as Siddhartha Gautama and became the Buddha—the Enlightened One. His teachings have become the foundation of a faith that today has 500 million followers.

Religion scholar Karen Armstrong observed in her 2001 biography of the Buddha that "[s]ome Buddhists might say that to write a biography of Siddhatta Gotama [*sic*] is a very un-Buddhist thing to do." During his life, the Buddha was known for his teachings, but he did not want a following devoted exclusively to him. His preferences created a challenge for historians. Religious texts on Buddhism abound, but concrete facts about his personal life—including when he lived—are few.

GOLDEN BUDDHA (CENTER), ON THE B MARAN RELIQUARY. FIRST CENTURY A.D BRITISH MUSEUM, LONDON
SCALA, FLORENCE

Scholars are turning to archaeology for a fuller picture of the Buddha's life and exploring sites sacred to the faith. In the past two decades, excavations at the UNESCO World Heritage site of Lumbini, Nepal, where tradition says Siddhartha Gautama was born, have unearthed some astonishing discoveries, including the world's earliest Buddhist shrine. These finds are shedding more light on the early development of Buddhism and the role of third-century B.C. Indian emperor Ashoka the Great in its spread. They are also providing crucial information in the quest to determine when Siddhartha was born, when he lived, and when he died.

Becoming the Buddha

Today's Buddhists practice their faith all over the world, with large concentrations in eastern Asia, especially China, Thailand, and Japan. As the religion spread, it divided into different schools with varying interpretations of the faith and different central texts detailing each branch's core beliefs.

The sacred texts describe Siddhartha's early life as part of the rich and powerful Shakya clan who controlled a region in the northeast Indian subcontinent. His parents were a man named

THE GREAT STUPA

In central India, the northern gateway of the Great Stupa at Sanchi, built by the third-century BC emperor Ashoka, features scenes from the Buddha's life. Stupas, domed Buddhist shrines, are found across India and Nepal

ASHOKA'S PILLAR

Emperor Ashoka, a convert to Buddhism, left monuments across the Mauryan empire, including one at Lumbini (left) to commemorate his visit in circa 249 B.C.

RA BLOCK/NGS

Suddhodana and a woman named Maya. In an attempt to protect Siddhartha from the evils of the world, his father isolated him in Kapilavastu to insulate him from pain and suffering.

It was only at age 29 that Siddhartha, who had become a husband and father, became disillusioned with life at the lavish court and ventured out into the world where he confronted for the first time the harsh realities of life: sickness, old age, and death. Leaving behind his parents, wife, and son, he rejected comfort to go into the world to seek wisdom and an end to human suffering. At Bodh Gaya, today in northeastern India, Siddhartha found his answers as he sat under a sacred fig tree *(Ficus religiosa)*, known as a *bhodi*. There, he attained enlightenment, or nirvana. In this new state, he became known as the Buddha, which means "awakened one."

MAYA'S DREAM. RELIEF FROM THE BHARHUT STUPA (MADHYA PRADESH, INDIA). INDIAN MUSEUM, KOLKATA

BRIDGEMAN/ACI

Scholars believe that Siddhartha taught others and a sect, which came to be known as a Sangha. Among its teachings was the advocation to turn away from worldliness and attachment in order to achieve the state of nirvana. A common Buddhist belief is that most people must repeat a cycle of death and rebirth over numerous lifetimes, a process called samsara, before they can reach enlightenment and be free of suffering.

Early Buddhist scriptures provide a common biographical narrative for the Buddha's life, but they present differing scenarios for when it took place. Some place the events as early as the mid-third millennium B.C., while others are as late as the end of the third century B.C.

Following the Buddha's death, his teachings slowly accreted into a distinctive new faith. Dedicated followers spread his teachings throughout Asia. At first, it was probably one of many new, small religions in the fertile intellectual and religious atmosphere of northern India of the time.

HOLY WATERS

The white walls of Lumbini's Temple of Maya stand over much earlier Buddhist structures. Tradition holds that, before giving birth to Siddhartha, Maya bathed in this pool.

F. BIENEWALD/GETTY IMAGES

SACRED STUPAS

The Temple of Maya is surrounded by several groups of shrines. Known as stupas, these shrines were built between the third and ninth centuries A.D.

R. BONNEROT/GETTY IMAGES

NG MAPS

Enter Ashoka

In the third century B.C., a most unusual king would come to power who would help this new faith burgeon and grow. His name was Ashoka, the grandson of the founder of the Mauryan empire, a powerful dynasty centered on the city of ancient Pataliputra (near modern-day Patna). The Mauryans exploited the power vacuum following Alexander the Great's death in 323 B.C., expanding Mauryan rule across northern India.

Ashoka the Great became emperor circa 265 B.C. and continued to conquer new territory for his empire. In the eighth year of his reign, he underwent a profound spiritual change. According to his own accounts, this occurred following Ashoka's conquest of the neighboring Kalinga region. After observing the suffering caused by his war, the king felt such remorse that he renounced violence and embraced Buddhism. Ashoka imposed Buddhist teachings as a state policy and inscribed his new principles and strategies on landmarks and pillars across his empire.

THE VISIT OF ASHOKA IS COMMEMORATED ON A THIRD-CENTURY B.C. PILLAR AT LUMBINI.
RA BLOCK/NGS

Ashoka's embrace of Buddhism sparked a massive spread of the faith across India. By around 50 B.C. various schools of Buddhism started to "travel" along trade networks, including the Silk Road. Buddhism started taking root thousands of miles east of its homeland, reaching Japan by the fifth century. As Buddhism expanded, its adherents began performing pilgrimages to the Buddha's birthplace—Lumbini.

New Light on Lumbini

Buddhist texts describe Maya's giving birth there; she had been traveling to her parents' home when she went into labor at Lumbini and gave birth while holding on to the branch of a sal tree. For several centuries after the Buddha's death, the site remained important, but its popularity waned over time, perhaps owing to political upheavals in the region.

PRESENT AND PAST

Buddhist monks pray at the wall of the Temple of Maya at Lumbini while archaeologists are excavating ancient sacred structures at the site.

IRA BLOCK/NGS

DEPTHS OF TIME

Work inside the Temple of Maya at Lumbini has exposed layers of bricks dating to the third century B.C.

IRA BLOCK/NGS

ENLIGHTENING

The Mahabodhi Temple at Bodh Gaya, in Bihar, India, marks the traditional place where the Buddha attained enlightenment under the *bodhi* tree. First constructed in the time of Ashoka in the third century B.C., the present structure—built entirely of brick—dates from the fifth century A.D.

OLAF SCHUBERT/ALBUM

THE SACRED TREES OF BUDDHISM

TREES APPEAR IN CRUCIAL MOMENTS in the central stories of Buddhism, from the birth of Siddhartha, to his achieving nirvana, to his death at age 80. When Siddhartha's mother, Maya, went into labor in Lumbini, the branch of a sal tree *(Shorea robusta)* supported her while she gave birth to her son. A fig tree *(Ficus religiosa)* shaded the seated Siddhartha as he achieved nirvana at Bodh Gaya in Bihar, northeastern India. At the end of his life, religious texts say the Buddha lay down between two sal trees in Kushinagar, India, before passing from this world. Because of their importance in Buddhist texts, trees are often implemented in Buddhist art and architecture as well. Some early examples were first built by the emperor Ashoka in the third century B.C., such as the Mahabodhi Temple at Bodh Gaya that marks the place where Siddhartha attained enlightenment; leafy trees adorn the temple reliefs, while a living descendant of the sacred *bodhi* tree grows alongside the temple itself.

LEAVES AND BOUGHS
A relief from the Great Stupa in Sanchi, India, depicts the branches and the tree shrine at Bodh Gaya, where the Buddha gained enlightenment.
HARI MAHIDHAR/AGE FOTOSTOCK

In the 1890s a pillar was found there with a third-century B.C. inscription in the name of King Devanam Priya Priyadarsin, identified by most historians as Ashoka the Great. It stated: "Having been anointed twenty years, he came himself and worshipped this spot, because the Buddha Shakyamuni was born here." The Buddha's birthplace had been rediscovered.

Excavations at Lumbini have revealed a complex site with many structures erected over centuries. One of the most sacred is the Shakya Tank, a pool where Maya is believed to have bathed before giving birth. Remains of Buddhist monasteries have been found dating from the third century B.C. to the fifth century A.D. Archaeologists have also uncovered ruins of stupas (sacred shrines) from as recent as the 15th century A.D. The site's principal building, the Temple of Maya, was built over earlier Ashokan structures. In 1996 a block was found beneath the temple, believed to mark the spot of the Buddha's birth. In 1997 UNESCO designated the Lumbini complex as a World Heritage site.

Until recently, the earliest archaeological evidence of established Buddhist practice has been from the third century B.C., but a discovery in 2011 may change that belief. An international team had been excavating beneath an Ashokan-era brick pavement at Lumbini. Led by archaeologists Robin Coningham and Kosh Prasad Acharya, the team removed the pavement to find remnants of a wooden structure. When analyzed, the samples were found to date to around 550 B.C.

Mineralized tree roots found there suggest the wooden structure was likely a *bodhigara,* a tree shrine. While these kinds of remnants have also been associated with pre-Buddhist sites, Coningham and Acharya both believe the find's distinctive traits are Buddhist.

According to tradition, the Buddha designated Lumbini as a pilgrimage site during his lifetime. As the tree shrine has been dated to around the sixth century B.C., the discovery suggests that the Buddha may have lived some time in the sixth century B.C. and gives historians new evidence to weigh as they strive to reconstruct the life of the Buddha.

SPECIALIZING IN THE HISTORY OF SOUTHEAST ASIA, VERONICA WALKER IS A POSTDOCTORAL RESEARCHER AT THE UNIVERSITY OF HELSINKI, FINLAND.

QUIET CONTEMPLATION

A Buddhist sage, known as a sadhu, sits under a *bodhi* tree in Lumbini, which is an active Buddhist pilgrimage site even as archaeologists are excavating it.

F. BIENEWALD/GETTY IMAGES

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SACRED STORIES IN STONE

Built in the third century B.C., the Great Stupa at Amaravati was one of Buddhism's most important monuments in ancient India. Visiting pilgrims could visit the stupa and see elaborate reliefs depicting the Buddha's life. Some of these artworks, such as this one depicting his birth, can now be seen in the galleries of the British Museum.

1 THE DREAM
Maya, soon to be the Buddha's mother, dreams that a white elephant has entered her right side. Attending her are the four heavenly kings, the *dikpalas*, entrusted with guarding the four cardinal points of the compass.

2 THE INTERPRETATION
Sages and wise men interpret Maya's dream for her husband, Suddhodana. They explain that it is a foretelling that Maya will give birth to a son who will become a great man and change the world.

3 THE BIRTH
Grasping the branch of a tree in the garden of Lumbini, Maya stands as she gives birth. According to tradition, her child emerges from the same spot on her body where the elephant entered in her prophetic dream.

4 THE PRESENTATION
Maya (right) presents a cloth, which symbolizes her newborn son, to Shakya-vardhana, a tree deity and the *yaksha* (protective spirit) of the Shakya clan. With hands pressed together, the yaksha greets the child reverently.

BRITISH MUSEUM/SCALA, FLORENCE

MOTHER AND SON

Cleopatra VII ordered this huge relief of herself and her co-regent and heir, Caesarion (right), carved on the walls of the Dendera temple complex. Opposite: A bust of Caesarion's mother, Cleopatra, held in the Neues Museum, Berlin

RELIEF: SCIENCE SOURCE/GETTY IMAGES; FOTOSTOCK

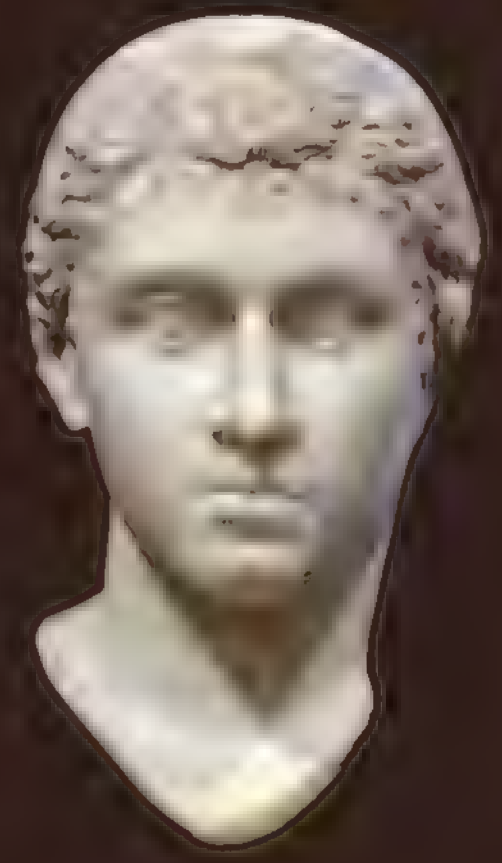
BUST: AKG-IMAGES

CAESARION

HEIR TO CLEOPATRA'S EGYPT

Cleopatra's love affair with Julius Caesar produced one child: a son, best known to the world as Caesarion, "little Caesar." The young prince stood to inherit his mother's throne, burgeoned by his blood ties to Rome, but the death of Caesar led to the downfall of his dynasty.

JUAN PABLO SÁNCHEZ



HELPING HAND
Julius Caesar restores Cleopatra to the Egyptian throne in a 1637 oil painting by Pietro da Cortona. Museum of Fine Arts, Lyon

NICO TONDINI/GETTY IMAGES

PTOLEMAIC TEMPLE
The Temple of Horus at Edfu (right) is one of Egypt's best preserved monuments from the Ptolemaic era. Finished in 57 B.C., it took 180 years to complete.

JOSSE/SCALA, FLORENCE

Ptolemy Caesar "Theos Philopator Philometor"—"Ptolemy Caesar, The God Who Loves His Father and Mother"—became king of Egypt at the tender age of three. His alleged father, Julius Caesar, had been assassinated several months earlier, and his mother, Queen Cleopatra VII, placed him on the throne to solidify her power as queen of Egypt.

Better known to history by his Greek nickname "Caesarion," or "little Caesar," Cleopatra's son reigned only a short time; his rule ended with his murder, shortly after the suicide of Cleopatra in 30 B.C. The deaths of mother and son brought an end to the Ptolemaic line of rulers who had controlled Egypt since the time of Alexander the Great.

Family Quarrels

Caesarion's story began when his grandfather, Ptolemy XII, named his two oldest children, 18-year-old Cleopatra and 10-year-old Ptolemy XIII, as co-heirs. They would serve together under the guardianship of Rome. Because Egypt had become a Roman protectorate during the elder Ptolemy's rule, Romans had a say in who would be ruling Egypt.

After their father's death in 51 B.C., Ptolemy and his sister were symbolically wed, but there was no love between them, familial or otherwise. The Ptolemaic kings and queens had a long family tradition of competing for the throne: sibling against sibling or parent against child. Two years later, Ptolemy's advisers tried to move against Cleopatra to make the young boy the sole ruler.

LAST DAYS OF A DYNASTY

47 B.C.
Ptolemy Philopator Philometor Caesar is born to Cleopatra of Egypt, who claims that Roman Julius Caesar is the father.

46 B.C.
Queen Cleopatra, accompanied by her son Caesarion, are welcomed by Julius Caesar for their first visit to Rome.

TORSO OF A PTOLEMAIC KING, POSSIBLY CAESARION (PTOLEMY XV). BLACK BASALT, 80–30 B.C. METROPOLITAN MUSEUM OF ART, NEW YORK
PR SMA/A..BUM

MARCH, 44 B.C.
On her second trip to Rome, Caesar is assassinated. Caesarion is not named his heir. Cleopatra and son quickly return to Egypt.

JULY, 44 B.C.
Cleopatra plots the murder of her brother Ptolemy XIV so she may crown her son Caesarion Ptolemy XV and rule as co-regent.

34 B.C.
Infuriating Octavian, Mark Antony officially recognizes Caesarion as the son and heir of Julius Caesar and co-regent of Egypt.

30 B.C.
Fleeing to Alexandria after a crushing defeat, Cleopatra tries to send Caesarion to safety in the East. Octavian captures the teen and executes him.

Sacred Imagery

IN ARMANT near Luxor, within a large temple complex, Cleopatra built a small sanctuary known as a *mammisi*, or birth house. Artworks there depict Cleopatra as the mother goddess Hathor, goddess of the sky, while her son Caesarion was shown as the god Horus in various forms. The sanctuary was destroyed in the 19th century, but fortunately detailed copies had been made of its reliefs.

IN ONE RELIEF (LEFT), two cow-headed goddesses sit on a divan, each one nursing a male child. Scholars have identified them as Har-pe-khrad ("Horus the child") and Caesarion, but their nearly identical depictions are meant to strengthen Caesarion's association with the divine as well as his claim to the throne of Egypt.

SCIENCE MUSEUM/AGE FOTOSTOCK

DICTATOR FOR LIFE
A golden aureus (below) from Cisalpine Gaul, minted in 43 B.C., shows a wreathed Julius Caesar and commemorates Caesar being proclaimed *dictator perpetuo*.

AGE FOTOSTOCK

As the two Egyptian siblings were squabbling over their throne, Rome was in the middle of its own power struggle. Two of its great military heroes, Julius Caesar and Pompey the Great, were engaged in a civil war and were looking for alliances. Pompey needed Egypt and decided to back Ptolemy XIII over his sister, who went into exile. Far from the capital, Cleopatra established her own base of operations where she raised an army and bided her time.

In the Battle of Pharsalus in 48 B.C., Caesar defeated Pompey, who fled to Alexandria. In a reversal, the young Ptolemy had Pompey executed and presented his head to Julius Caesar when he swept into Egypt later that year. Caesar was saddened and disgusted: Ancient historian Plutarch wrote in the first century A.D. how Caesar had "turned away in horror [when] presented the head of Pompey, but he accepted Pompey's seal-ring, and shed tears over it."

This gross miscalculation on the young pharaoh's part was a prime opportunity for Cleopatra and her forces. She smuggled herself into Alexandria for a meeting with Caesar and won him to her cause. He supported her claim to the throne, sparking an uprising of Ptolemy's supporters who were defeated. The young king was killed, and Caesar placed the 21-year-old Cleopatra VII on the throne. She would co-rule, in name, with a younger brother, Ptolemy XIV. To consolidate the alliance, Cleopatra invited Caesar, 30 years her senior, to stay in Egypt with her.

Son of Rome and Egypt

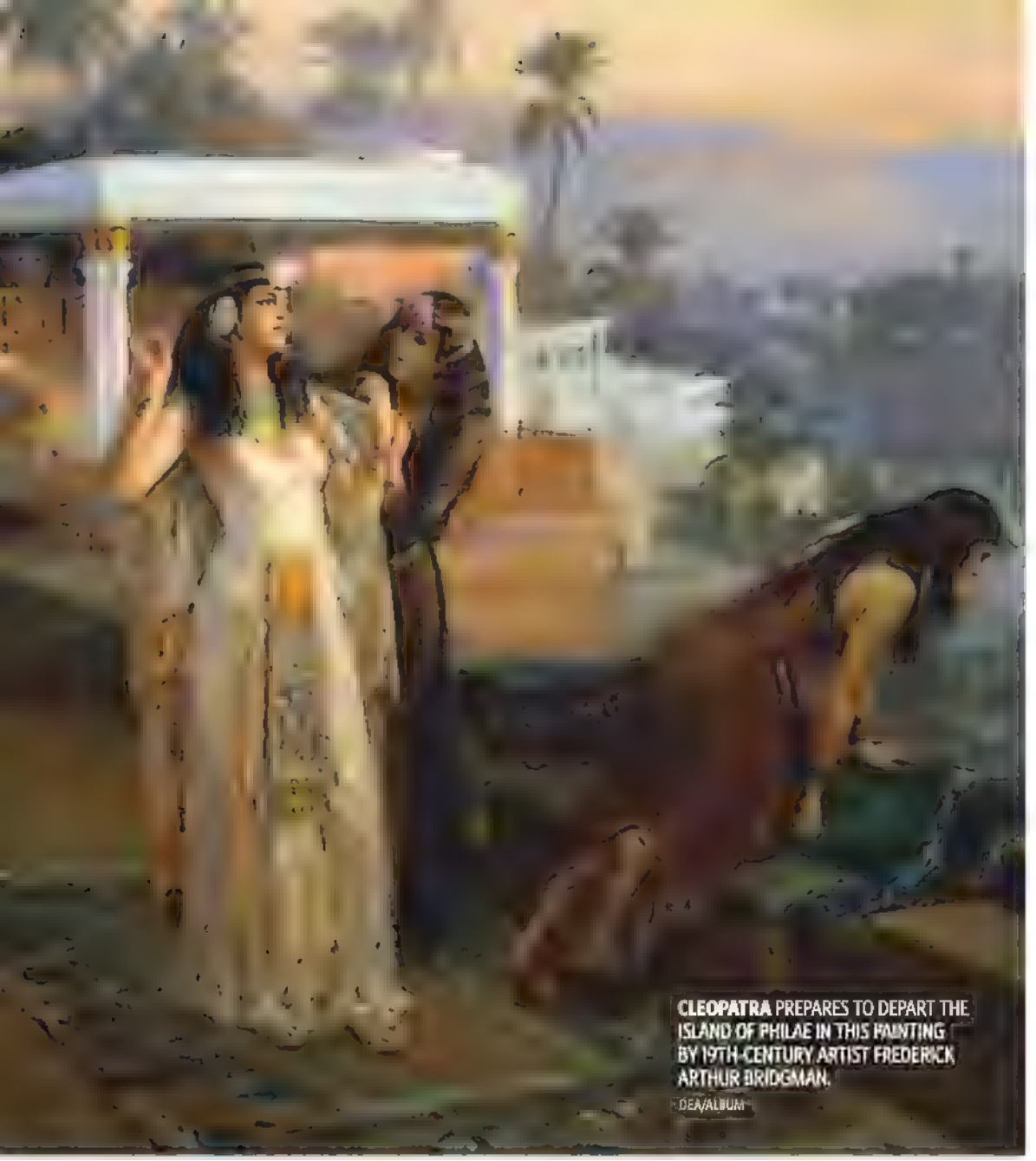
For two months Cleopatra entertained Caesar, revealing to him the charms that both the Nile Valley and she herself had to offer. Plutarch wrote: "[Caesar] often feasted with her until dawn; and they would have sailed together . . . to Ethiopia." By the time Caesar left Egypt, Cleopatra was pregnant. She gave birth to a boy in 47 B.C. and openly proclaimed Julius Caesar the father. Egyptian priests began to teach that the god Amun had incarnated himself in the person of Caesar, the most powerful man in the world at the time, to father the baby prince.

At the end of 46 B.C., Cleopatra visited Rome at Caesar's invitation, bringing Caesarion and all the royal pageantry of her court. Plutarch wrote that Caesar "would not let her return to

LOVE GODDESS

Inside the Temple of Venus Genetrix in Rome, Julius Caesar placed numerous cult statues to Venus, including a gilded bronze statue of Cleopatra as Isis. Standing at one end of Caesar's forum, the temple was dedicated in 46 B.C.

ILLUSTRATION:



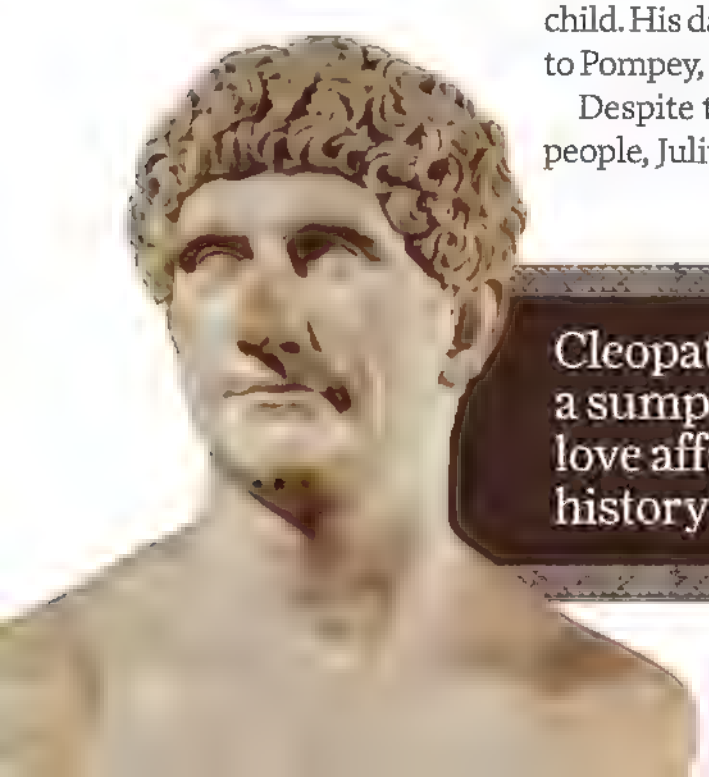
CLEOPATRA PREPARES TO DEPART THE ISLAND OF PHILAE IN THIS PAINTING BY 19TH-CENTURY ARTIST FREDERICK ARTHUR BRIDGMAN.

DEA/ALBUM

OCTAVIAN'S RIVAL

Lover of Cleopatra and father to three of her children, Mark Antony (below) competed for control of Rome with Octavian, Julius Caesar's heir. Yellow marble, first-century A.D. bust. Vatican Museums, Rome

DRONOZ/ALBUM



Alexandria without high titles and rich presents. He even allowed her to call the son whom she had borne him by his own name." Caesar welcomed Cleopatra and her family in one of his suburban villas, the Horti Caesaris, showering her with official honors.

Many Romans remarked that the child looked markedly like Julius Caesar. Mark Antony, Caesar's lieutenant, told the Senate that Caesar had acknowledged to his closest friends that Caesarion was indeed his son. If Cleopatra's claims were believed, Caesarion was Caesar's only surviving child. His daughter, Julia, who had been married to Pompey, died in childbirth in 54 B.C.

Despite the cool reception from the Roman people, Julius Caesar was optimistic about the relationship between Rome and Egypt. He erected a statue of Cleopatra in the Temple of Venus Genetrix. This era marked what Caesar saw as the beginning of an ambitious imperial project. Rumors spread that he was even mulling a transfer of the imperial capital to Alexandria.

His plans would not be realized, for Caesar was assassinated on the Ides of March in 44 B.C. He never acknowledged Caesarion as his heir and instead had written in his will that his great-nephew, Gaius Octavius (Octavian), was his heir. Cleopatra and Caesarion were in Rome when Caesar was killed. Realizing that their lives were in danger, Cleopatra decided to return to Egypt immediately.

> Cleopatra took Antony on a sumptuous cruise and a love affair ensued, one of history's most passionate.

Life After Caesar

As soon as she arrived back in Alexandria, the queen moved to consolidate her power. Sources say she had her brother and co-ruler, Ptolemy XIV, poisoned and then appointed her toddling son as her co-regent. From this point, Caesarion was officially recognized as Ptolemy XV Caesar.

In Rome Octavian refused to recognize the lineage of Egypt's young co-regent. With calculated timing, the late Julius Caesar's right-hand man and confidante Gaius Oppius published a book in which he claimed that Caesarion was not the son of Caesar at all. It was a warning to Cleopatra to tread carefully with the new masters of Rome.

Caesarion's fortunes were revived in 42 B.C. when Mark Antony arrived in Egypt as Roman triumvir in charge of the eastern provinces. He was seeking a way to bring down fellow triumvir Octavian, and in 41 B.C. he summoned Cleopatra to Tarsus. The queen navigated this important meeting just as carefully as her first with Julius Caesar.

For the sake of her kingdom and of her son, Caesarion, she took Antony on a sumptuous cruise and a love affair ensued. This relationship has long been regarded as one of history's most passionate, but historian Mary Beard revealed its more practical side: "Passion may have been one element of it. But their partnership was underpinned by something more prosaic: military, political, and financial needs."

Antony spent the winter of 41–40 B.C. in Egypt with Cleopatra. From their union twins were born and named after the astral deities: Alexander Helios (Sun) and Cleopatra Selene (Moon). Later, they had another son named Ptolemy Philadelphus. During this time, Cleopatra

CARVED FOR CAESARION

The figures of Caesarion (left) and Cleopatra (right) were carved over earlier inscriptions on this granite stela from Karnak, which dates originally from the eighth century B.C. The new texts and images, carved in the 13th year of Cleopatra's reign, pay homage to one of Cleopatra's generals. Egyptian Museum, Turin

DEA/ALBUM

LAST STAND
Lorenzo Castro's 1672 oil painting of the Battle of Actium of September 2, 31 B.C., in which Octavian routed the combined naval forces of Mark Antony and Cleopatra VII off western Greece
National Maritime Museum, London
AKG/ALBUM

PHARAOH'S HEAD BELIEVED TO BE OF YOUNG CAESARION. GRANITE, FIRST CENTURY B.C.
ZUMA PRESS/ALAMY/ACI

Portraits of a Prince

THE EARLIEST EXISTING depictions of Caesarion appear on coins minted in Cyprus in 44 B.C. Even though the boy was then a toddler, he was still shown as a baby in his mother's arms. There are later works of art in which Caesarion appears as a young man, wearing the typical Egyptian headdress (*nemes*) and kilt (*shandyt*), as in traditional images of the pharaohs.

MANY REPRESENTATIONS of Caesarion associate him with the Egyptian god Horus, the son of Isis and Osiris. After Osiris is violently murdered by his rival Set, Isis must protect her son and restore the rightful king to the throne. Cleopatra smartly used this imagery to win support for Caesarion and cast herself in the role of divine maternal protector.

EGYPT UNDER ROME
A silver coin to commemorate the conquest of Egypt by Octavian (below) bears a crocodile and the inscription *aegypto capta*, which means "Captive Egypt." Berlin State Museums

BPK/SCALA, FLORENCE

was also expanding her empire, gaining territory for Caesarion in southern Syria, Cyprus, and northern Africa.

Cleopatra's greatest moment came during a ceremony held at the Alexandria gymnasium in 34 B.C., when Antony officially recognized her as queen of Egypt and bestowed on Caesarion the title "King of Kings." Antony also formally recognized Caesarion as the legitimate son of Julius Caesar. Antony granted his three children with Cleopatra the title of royal highnesses and to his son Alexander Helios he promised territories and kingdoms.

The provocation was too much for Octavian and he declared war on Cleopatra and Antony. On September 2, 31 B.C., he vanquished their forces at the Battle of Actium. The defeated pair retreated to Alexandria. Cleopatra decided it was safer to send Caesarion out of the city. He headed south in the company of his tutor, who took him up the Nile to the village of Copt (Qift), not far from Thebes. From there, caravans set off, passing through the eastern desert to the commercial port of Berenice, on the shores of the Red Sea. Caesarion's only feasible escape route was across these inhospitable lands. If he made it to Berenice, he would have a chance to get out of Egypt and set sail for Arabia or even to India.

While making his way to the port that might have allowed him a route to exile, Caesarion learned that Roman troops had entered Alexandria and that his mother and Mark Antony were both dead. Had he carried on with his escape plan, Caesarion might have survived, but his tutor suggested that Octavian would take pity on the orphan.

Indeed, Octavian had considered sparing the young man's life. One of his confidants convinced him otherwise; it was inappropriate, he said, for there to be "too many Caesars." So when Caesarion arrived in Alexandria to meet Octavian in August, 30 B.C., he was immediately executed. The dream of a Roman-Egyptian pharaoh vanished, and the ancient Ptolemaic kingdom of Egypt died with Caesarion.

JUAN PABLO SÁNCHEZ IS A SPECIALIST IN CLASSICAL HISTORY AND LITERATURE, AND A TRANSLATOR OF PLUTARCH'S *PARALLEL LIVES*.

Learn more

BOOKS

When Women Ruled the World: Six Queens of Egypt
Kara Cooney. National Geographic, 2018

LAST RESORTS

Many historical sources that document the last days of Cleopatra's life differ in their accounts. According to Dio Cassius, Cleopatra tried to seduce Octavian, but Plutarch wrote that she begged him for her and her children's lives, as depicted in this 17th-century painting by Il Guercino. Capitoline Museums, Rome

ALBUM

CAESARION WEARS THE STRIPED HEAD CLOTH (*NEMES*) OF THE PHARAOHS IN A FIRST-CENTURY B.C. ROSE GRANITE STATUE, NATIONAL ROMAN MUSEUM, ROME

AKG/ALBUM

THE CHILDREN'S FATES

After he had their brother Caesarion executed, Octavian took Cleopatra's three other children (all by Mark Antony) back with him to Rome.

AFTER THE CHILDREN arrived in Rome, sources say Octavian presented them in chains to the Roman people and paraded them through the streets in triumphal procession. Some sources say Octavian wished to execute them after the triumph, but that Octavia the Younger, his elder sister and the late Mark Antony's ex-wife, convinced him to let her raise them alongside her own children.

THE FATE OF the two boys is unknown. None of the popular historians of the time mention either Alexander Helios or Ptolemy Philadelphus again, which leads many to believe they died in childhood. Cleopatra Selene did survive; she married Juba II, king of Numidia and then Mauritania, and had several children with him. Her body supposedly lies next to that of her husband in the mausoleum that the new Mauritanian dynasty erected in Tipasa (Algeria).

SERPENTS PROTECT THE ELDEST CHILDREN OF CLEOPATRA AND MARK ANTONY APPEAR PROTECTED BY SNAKES. LIMESTONE STATUE, FIRST CENTURY B.C. EGYPTIAN MUSEUM OF ANTIQUITIES, CAIRO

KENNETH GARRETT/GETTY IMAGES

COMING TO CONQUER

William the Conqueror's forces disembark in England in September 1066, two weeks before the Battle of Hastings, in a scene from the Bayeux Tapestry. **Opposite, below:** William sits enthroned in a detail from a 14th-century genealogical illustration.

BOTH BELOW: ALBUM

THE FABRIC OF HISTORY

THE BAYEUX TAPESTRY

Stretching nearly 230 feet long, the 11th-century Bayeux Tapestry chronicles William the Conqueror's overthrow of the Anglo-Saxon king in 1066. From beginning to end, history unfolds like a movie, as each vivid scene shows how the Normans conquered England.

FERNANDO LILLO

Stitches in Time

1042
Edward the Confessor, son of Aethelred II and Emma of Normandy, takes the English throne. The pair will not produce a biological heir.

1064
Edward sends Harold, son of his powerful adviser Godwin, to tell William, Duke of Normandy, that he will be England's next king.

JANUARY 5, 1066
Edward dies, and Harold crowns himself king the next day. William prepares for an invasion of England that will launch in September.

OCTOBER 14, 1066
William's soldiers kill Harold on a field near Hastings, Sussex. William will be crowned King William I of England on Christmas Day.

CIRCA 1100
A tapestry depicting the events of 1066 is completed, perhaps on the orders of Bishop Odo of Bayeux, a close Norman ally of William.

1476
An inventory at Bayeux Cathedral lists the cloth, the first documentary reference to what is now called the Bayeux Tapestry.

WILLIAM THE CONQUEROR WEARS A CROWN ON THIS SILVER PENNY MINTED BETWEEN 1066 AND 1068. BRITISH MUSEUM, LONDON
BRIDGEMAN/ACI

MAN OF THE CLOTH
Poised to bring down his mace, Bishop Odo (above) rallies the Normans at the Battle of Hastings in a 1966 painting for National Geographic by Tom Lovell. Odo is believed to have commissioned the Bayeux Tapestry.
NATIONAL GEOGRAPHIC CREATIVE/ALAMY/ACI

The date 1066 is imprinted on the minds of generations of British schoolchildren. This was the year that William, Duke of Normandy, defeated King Harold II at Hastings and set in motion some of the most profound political and social changes in English history.

The Norman Conquest imposed on England an entirely new, French-speaking ruling class, a huge stock of new surnames—Warren, Lewis, Sinclair, Boyle, Churchill, to name a few—and planted the seeds of the modern English language. Yet the most vivid chronicle of this upheaval is not expressed in words, but in colored threads across nearly 230 feet of linen.

What is now known as the Bayeux Tapestry is not, in fact, a tapestry at all, but an embroidery of woolen thread stitched on to cloth. Ten colors create rich scenes that recount the story of the fateful clash between William and Harold: Scenes of pomp and diplomacy; a fleet of longboats filled with troops and supplies; and the fury of the battle itself, in which arrows fly and men and horses crash to the soil. The only

HASTENING TO HASTINGS

King Harold II's route (above) from York made stops in Lincoln and London before taking the old Roman road from Rochester to Hastings, where William the Conqueror's Norman army had encamped.

NG MAPS

missing scene is the conclusion, the depiction of William's coronation as the English king. Captions in Latin label key figures and events. Progressing from scene to scene like a comic strip, the upper and lower bands are richly decorated with marginalia: Scenes from the fables of Aesop or of the pleasures of the hunt.

Produced in the decades following the Battle of Hastings, the tapestry's association with Bayeux in Normandy, in whose cathedral it was stored for many centuries, suggests that its initiator was Bayeux's bishop, Odo. Half brother of William, Odo also fought at Hastings. Odo's massive work was most likely conceived as propaganda for a mass audience, trumpeting the legitimacy of the Norman Conquest through its depiction of the political events leading up to the battle. A knowledge of complex dynastic disagreements helps decode the "plot" of this medieval masterpiece.

A Promise Broken

Before the Battle of Hastings, English kings descended from the ninth-century Anglo-Saxon ruler Alfred the Great, considered to be the first king of a united England. Alfred's successors made dynastic marriages with powerful neighbors, including the nobles of the Duchy of Normandy, which extended in and around the Normandy peninsula in France.

The Normans (whose name derives from "northmen") were descended from the Vikings of Scandinavia, who marauded the French coast starting in the 800s. The Normans became Christians, adopted the French language from the peoples whom they invaded, and amassed considerable power and wealth.

Dynastic marriages often sow the seeds of future succession crises. In 1002 Aethelred II—also known as "the Unready," meaning "poorly advised"—married Emma, daughter of the Duke of Normandy. Their son was Edward, who would rule England from 1042 as Edward the Confessor.

Edward was unable to produce a biological heir, which left him vulnerable to the maneuverings of a powerful nobleman, Godwin, and Godwin's ambitious son, Harold. Across the Channel, the Duke of Normandy—William—had a

BAYEUX CATHEDRAL

The memorial tapestry may have been designed to decorate the walls of this Norman Romanesque and Gothic cathedral consecrated in 1077

RICCARDO SPILA/FOTOTECA 9X9

strong claim to the English throne through his great-aunt, Emma, who was Edward's mother.

According to the Norman version of events, King Edward sent Harold in 1064 to assure William that he would inherit the English throne. The mission was fraught: Harold was shipwrecked and taken prisoner by a Norman nobleman before William rescued him. Harold enjoyed William's hospitality and accepted the hand of his daughter. Harold—according to a single Norman source from the 1070s—swore fealty to William and pledged to support his claim to England's throne when Edward died. The Saxon version of events differs, and those sources claim that Harold never took this oath.

The scenes shown in the Bayeux Tapestry support the Norman story. They reinforce Norman legitimacy by depicting the solemnity of Harold's oath-taking and amplify the Norman sense of betrayal at what happened next. For when Edward the Confessor died in early 1066, Harold seized the throne and was crowned Harold II of England in January.

Enraged, William spent months preparing his forces in Normandy and then set sail for England with them in September. A gifted military commander, Harold was squashing a revolt in northern England when he heard of William's arrival on the Sussex coast. He quickly mustered all the soldiers and supplies he could and headed south, where he would meet his demise at the Battle of Hastings. Following Harold's death, William the Conqueror became king.

Cloth of Conquest

It is generally believed Bishop Odo commissioned English artisans to create the massive narrative work some time around the year 1070. Many scholars believe it was intended for his new cathedral built in Bayeux in 1077, but the precise intention is unknown.

On display today at the Musée de la Tapisserie de Bayeux in Normandy, visitors can see the tapestry in full, stretching across several pieces of linen cloth. Nearly 60 scenes embroidered in wool thread show kings, armored soldiers, packed longships, galloping horses, and wild beasts. Art historians believe that each panel was first embroidered before being attached to other panels.

EMBROIDERY BY NUMBERS

THE BAYEUX TAPESTRY measures nearly 230 feet long by 20 inches high and consists of nearly 60 scenes of woolen thread embroidered on linen. Its scenes are populated by hundreds of warriors, 174 horses, 55 dogs, and 37 ships. Despite the fact that only three women are shown in the tapestry, it was almost certainly stitched entirely by women, probably nuns.

The tapestry first appears in the historical record in 1476 in an inventory of cathedral goods. Scholars believe it was displayed one day a year and then stored in the vestry. It isn't mentioned again until the 18th century. A century later, it went on display in the Louvre in 1803, where Napoleon may have viewed it.

The Bayeux Tapestry remains a potent symbol of conquest. In 1944, ahead of advancing Allied troops, France's Nazi occupiers took it to Paris but abandoned it there before the liberation of the city. The tapestry, and its chronicle of William's conquest, resonated with the British troops, given that the D-Day landings took place on Norman beaches. In the Commonwealth war cemetery at Bayeux, a Latin inscription reads: "We, once conquered by William, have now set free the Conqueror's native land."

THE ROYAL TOUCH

One legend about the tapestry's origins is that William I's wife, Matilda of Flanders, oversaw the creation of the tapestry. Matilda is depicted above in a 19th-century oil painting by Alfred Guillard.

BENOIT TOUCHARD/RMN-GRAND PALAIS

HISTOR AN FERNANDO LILLO WRITES ON EUROPEAN MEDIEVAL HISTORY AND C.ASS CAL ROME AND GREECE

IMAGES OF INVASION

The following pages show eight key scenes from the Bayeux Tapestry,

Orders From King Edward

KING EDWARD THE CONFESSOR, seated on his throne receives ① Harold. Edward is represented with the conventional trappings of kingship, including a throne with ② feet in the shape of lion paws. To the left appears ③ a palace that historians surmise is Winchester, the political capital, but the lozenge pattern shown around the doorway was a feature of the Palace of Westminster in London. Edward instructs Harold to visit William, Duke of Normandy, and confirm that William will inherit the English throne. ④ Harold sets out on horseback, bearing a hawk on his left arm and his hounds racing ahead of him.

which is kept at the Bayeux Tapestry Museum in Normandy, France.

JEAN GOLBEIX, SIMON GU...LOT/RMN-GRAND PALAIS

Harold, William, and the Mystery Woman

AFTER A ROUGH VOYAGE to Normandy, including a shipwreck, Harold (still holding his hawk) is led by ⑤ William to his palace. A man welcomes them from a tower. Inside, a seated William listens as ⑥ Harold addresses him before a collection of soldiers with their shields. The adjacent scene depicts a scene that confounds scholars: ⑦ A female figure named Aelfgyva appears as an unnamed cleric touches her cheek. She appears nowhere else in the tapestry, and art historians do not know who she is. Several theories abound but none is conclusive as to the mysterious lady's identity.

Harold's Solemn Oath

HAROLD SWEARS FEALTY to ① William, Duke of Normandy. Emphasizing the solemnity of the oath, ② Harold swears on two reliquaries and before ③ two witnesses, one of whom points to the Latin word for oath, *sacramentum.* Harold then sails ④ his longship back to England where a ⑤ figure standing on a watchtower greets him and his men. This key scene in the tapestry is supported by only one Norman source, while Anglo-Saxon sources, which favor Harold, claim no oath was ever made. The depiction of Harold's vow underlines the tapestry's role as a piece of propaganda to show Harold as a betrayer.

JEAN GOUBEIX, S.MON GU ...OT/

The Coronation and the Comet

AFTER THE DEATH of King Edward, Harold breaks his vow to William, Duke of Normandy, and proclaims himself king of England. Harold sits on the throne with royal regalia, including ⑥ a crown similar to that worn by King Edward. Courtiers present him with ⑦ a sword as a symbol of royal power. In the next scene an amazed crowd looks to the heavens as ⑧ a dazzling comet streaks across the sky. The juxtapositioning suggests that the comet, regarded as presaging doom, is connected to Harold's January crowning. Scholars believe it is Halley's comet, which appeared in the spring months of 1066.

William Crosses the Channel

WHEN WILLIAM HEARS that Harold has betrayed him, he decides to invade England. Mounted on a black steed and followed by four knights, ① William heads for his ships, which set out from an estuary of the Somme River on September 27. Accompanying him are 4,000 to 7,000 cavalry and infantry. Hanging from the boats are ② distinctive, elongated Norman shields. ③ Smaller ships appear in the background and create an illusion of depth. The total journey across the Channel was 75 miles. Scholars believe William and his men probably launched the boats in the evening and arrived roughly 15 hours later.

JEAN GOUBEIX, S.MON GU ...OT/RMN-GRAND PALAIS

The Heat of Battle

FIERCE FIGHTING MARKS all the scenes that depict the Battle of Hastings. ④ The Latin text running along the top reads: "Here both the English and the Franks [Normans] fell." Both sides wear similar armor and ⑤ helmets with nose guards. In the center ⑥ Norman horses tumble in a swampy patch, the *malfosse* (bad ditch) referred to in a later account of the battle. The ditch's jagged shapes may be reeds, or may be defensive spikes placed by the English. ⑦ A group of English fighters defending a hillock wear no armor. Some historians believe they are specialist infantry; others theorize they are unarmed peasants.

Rallying the Knights

AT A NORMAN MOMENT of weakness during battle, ① Bishop Odo of Bayeux rides in, according to the Latin above him, "holding a staff, to rally the youth." Rather than strictly referring to "boys" (*pueros* in Latin), the text most likely refers to the young warriors who had not yet achieved knighthood. In a parallel bid to reassure his troops he is still in control, ② William raises his helmet and shows his face to rally the troops to victory. Along the bottom, ③ a series of archers ready their bows. Odo's heroic role in this scene supports the belief that he is the one who commissioned the tapestry.

JEAN GOUJON, BEAUX S MONSIEUR, 2007, BAYEUX, MUSÉE DE LA TAPISSERIE DE BAYEUX, GRAND PALAIS

Death on the Battlefield

THE BATTLE CLIMAXES with the dramatic death of Harold II, shown in a series of figures. Historians believe that he is ④ first struck in the eye with an arrow, which appears directly under the Latin text with his name and death. In 1100 Baudri, the abbot of Bourgueil, described an embroidery that depicted King Harold dying with an arrow to the eye; however, no other written source attests to Harold dying this way. Many believe now that the dying Harold is ⑤ a falling figure who appears to have been run through with a sword. It corresponds to an early description of the battle, which asserts Harold fell "covered with wounds."

BECOMING MACHIAVELLI

Surviving years in the snake pit of Renaissance politics and a torturous stint in jail, Niccolò Machiavelli penned *The Prince*, his landmark study of the mechanisms of power.

ANDREA FREDIANI

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Re di Spagnia in Napoli

MAN AND MANUSCRIPT

Santi di Tito's portrait of Machiavelli was painted after the author's death and hangs in the Palazzo Vecchio in Florence. Opposite: The opening lines of *The Prince* guide readers into the world of Renaissance politics. Biblioteca Medicea Laurenziana, Florence.

PHOTOS: SCALA, FLORENCE

In and Out of Political Power

1469
Niccolò Machiavelli is born in Florence the same year that Lorenzo "the Magnificent" de' Medici assumes power.

1494
The Medici are expelled from Florence when the Dominican friar Savonarola imposes his rule over the city.

1498
Savonarola is executed. At age 29, Machiavelli is appointed a senior diplomat under the city's chief minister, Piero Soderini.

1512
Machiavelli's allies are ousted when the Medici return to power after the Holy League defeats France, a Florentine ally.

1513
After being imprisoned by the Medici, Machiavelli is released and retires to the country, where he writes *The Prince.*

1516
Machiavelli dedicates *The Prince* to Lorenzo de' Medici, ruler of Florence and grandson of Lorenzo the Magnificent.

1527
After spending years working to restore favor with the Medici, Machiavelli dies on June 21, at age 58.

UP IN ARMS
The Medici coat of arms can be seen all over the buildings of Florence. The six *palle* (balls) gave rise to the term *palleschi* to denote Medici followers.
SCALA, FLORENCE

Life must have seemed good for Niccolò Machiavelli in late 1513. The former Florentine diplomat, who had built his reputation as a shrewd political analyst in his missions to popes and kings, was now at leisure on his farm near Florence. From there, Machiavelli wrote a letter to a friend on December 10 that year, describing his daily routine: He spent his mornings wandering his woods, his afternoons gambling in a local tavern. His evenings he spent in his study, where he composed "a little work": *De principatibus (On Principalities),* on which he said, "I go as deeply as I can into considerations on this subject, debating what principalities are, how they are gained, how they are kept, why they are lost."

Best known today as *The Prince,* this "little work" has had a mighty impact on history. With its most famous maxim—"It is better to be feared than loved"—the book explains not what rulers *ought* to do, but what they *need* to do to retain power. Considered an evil tract by many, modern philosophers now regard *The Prince* as the first modern work of political science.

Life, however, had not always been so restful or pleasant for Machiavelli as described in his letter. Only a few months before, he had found himself in mortal danger, on the sharp end of the power he so brilliantly analyzed. In 1512, the year before he wrote *The Prince,* the Florence administration he had served as a diplomat was overthrown by the Medici family, who had ruled Florence for much of the 15th century until their temporary overthrow in 1494. Machiavelli's diplomatic career had evolved in the 18-year absence of the Medici. With their return to power, he lost his political position—and nearly his life.

In February 1513 an anti-Medici conspiracy was uncovered, and Machiavelli's association with the old regime placed him under suspicion. Historians believe he was not involved but was arrested anyway. Held in the Bargello prison, Machiavelli was tortured over a period of several weeks by means of the strappado, a device that dropped bound prisoners from a height in order to dislocate their shoulders and arms. Machiavelli maintained his innocence throughout this excruciating ordeal.

FLORENTINE FRIAR

Machiavelli was 24 when the friar Girolamo Savonarola (below, on a circa 15th-century coin) expelled the Medici from Florence in 1494. Bargello Museum, Florence

SCALA, FLORENCE

The timely appointment of Giovanni de' Medici as pope in March 1513—together with Machiavelli's pleas to the Medici in the form of witty sonnets—helped secure his release. Injured, unemployed, but alive, Machiavelli found himself convalescing on his farm and writing what would become his masterwork.

Magnificence and Mayhem

Machiavelli was born in Florence in 1469, the son of a lawyer who had fallen on hard times. Nevertheless, the young Niccolò received a solid humanist education, learning Latin and some Greek. The Florence of his childhood was ruled by Lorenzo de' Medici, whose sobriquet "the magnificent" reflected not only his power and wealth but also his patronage of Renaissance luminaries such as Leonardo da Vinci, Michelangelo, and Sandro Botticelli.

Machiavelli was 24 at the fall of the

RETAKING PISA

Pisa's famous leaning bell tower can be seen behind the 12th-century cathedral complex. Under Florentine rule since 1406, the city broke away in 1494, but in 1509 it was retaken by the militias of the republic of Florence, created by Machiavelli.

SANDRA RACCANELLO/FOTOTECA 9X12

MACHIAVELLI AND SAVONAROLA

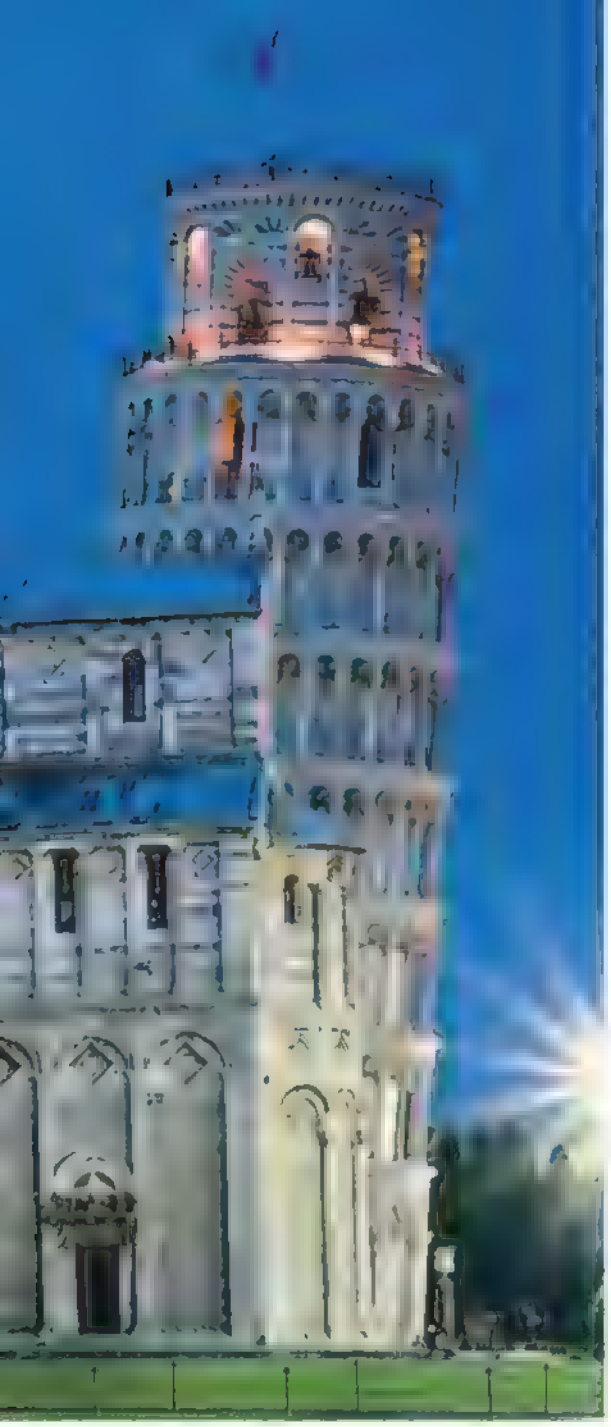
UNARMED PROPHET

For four years after the expulsion of the Medici in 1494, Florence was effectively governed by the ascetic Dominican friar Girolamo Savonarola, who railed against the corruption of the papacy and the vices of the Florentines. Long before he wielded direct power, the friar's fiery edicts would have loomed over Machiavelli's earlier years. Records show that Savonarola started preaching in Florence in 1482, when Machiavelli was 13, but the impact of these early sermons on the young man is unknown. The first mention of the friar in Machiavelli's papers dates to March 1498, when he was nearly 30 years old. In a letter Machiavelli recalled how Savonarola could captivate an audience and noted how the friar "acts in accordance with the times and colors his lies accordingly." The friar lost power and was executed two months later. Savonarola made an impression on Machiavelli, who later wrote of him in *The Prince*, calling him an "unarmed prophet." While he admired the friar's ability to adapt his message to the circumstances, Machiavelli later noted that while this skill might help one gain power, words alone were not enough to secure it: Force was necessary to keep a firm grip.

Medici in 1494 and lived through the subsequent de facto rule of Florence by the Dominican friar Girolamo Savonarola. The new leader railed against church corruption embodied in the worldly Pope Alexander VI. Savonarola most famously carried out a citywide burning of luxuries, the "bonfire of the vanities."

Savonarola was eventually ousted in 1498; he was hanged and his body burned. A lack of biographical information has made it difficult to account for Machiavelli's precise movements during the turmoil of these years. All historians know is that soon after Savonarola's demise, Machiavelli, then age 29, emerged to become head of Florence's second chancery. By the early 1500s he was effectively the foreign minister of the Florentine republic, serving the city's chief minister, Piero Soderini. The post required extensive travel and first-class political and diplomatic skills.

Machiavelli was privileged to have lived in highly interesting, if chaotic, times. While Italian cities, Florence in particular, were nurturing the great flourishing of learning and culture of



the Renaissance, the peninsula was, at the same time, the focal point of seemingly endless war, intrigue, and violence between Europe's powers.

France's self-destructive attempt to claim the Kingdom of Naples in the late 1400s attracted the emerging power of Spain and the old power of the Holy Roman Empire. All three were drawn deep into Italian affairs. In the confusing mosaic of Italian city-states, alliances continually shifted. Machiavelli gained a reputation for shrewdly interpreting the intentions of all contending powers and devising responses that would best serve Florentine interests.

One of his less successful diplomatic encounters was with the Countess of Forlì and Lady of Imola, Caterina Sforza, whom he met in 1499 in an attempt to secure her loyalty to Florence. The countess later reneged on a verbal agreement, making Machiavelli look somewhat foolish. He seems to have taken revenge by popularizing a sensational story about her reaction on learning, in a 1488 siege, that her children had been taken hostage: She stood on the ramparts, he wrote in *The Prince,* "and to prove to [her captors] that she cared not for her children, she pointed to her sexual parts, calling out to them that she had wherewith to have more children."

WARRIOR WOMAN
A 1481-1483 portrait by Lorenzo di Credi of the ruler of Forlì and Imola, Caterina Sforza, whose courage and stubbornness left a strong impression on Machiavelli. Pinacoteca Cívica di Forlì

The episode is probably apocryphal. Machiavelli resented Sforza, but the story also betrays a certain admiration. He may also have seen some irony in what happened next: In 1500, in part by forgoing the protection of Florence, Sforza lost the cities of Imola and Forlì to the man whom Machiavelli would one day make the model of his great work: Cesare Borgia.

Enter the Prince

The illegitimate son of Pope Alexander VI, Borgia embodied the mix of sacred and earthly claims to power that marked Renaissance Italy. Appointed a cardinal by his father, Borgia's true vocation was waging war and acquiring wealth. A brutal, ruthless, but often brilliant soldier, he had one obsessive aim: to carve out a state for himself and his clan in central Italy. He

PLOTTING REVENGE
In 1502 Cesare Borgia lured rivals to the fortress of Senigallia on Italy's Adriatic coast, where he ordered them killed. The act impressed Machiavelli, contributing to his theory that an effective prince knows when to use

MALE MODEL

In what would be one of the most significant meetings of his life, Machiavelli, in his role as Florentine ambassador, first met Cesare Borgia at Urbino in 1502. By then, Borgia had taken control of much of central Italy. The powerful Borgia family originated not in Italy but Aragon (in modern-day Spain); Cesare's great-uncle Alfonso had been appointed Pope Calixtus III in 1455 largely because his outsider status made him more palatable to feuding Italian families. To expand the clan's power in Italy, Calixtus III subsequently promoted his nephew Rodrigo. In 1492 Rodrigo became the new pope, took the name Alexander VI, and made his 18-year-old bastard son Cesare a cardinal. Cesare spent six years in the service of the church before renouncing his title to focus on his military conquests in central Italy. A brilliant strategist, Cesare was able to assemble and rule his own state (backed up by his father's papal power). Machiavelli was fascinated by his encounters with Cesare and exalted him in *The Prince* "as an example to be imitated." The great leader, Machiavelli argues, must be able "to conquer by force or fraud, to make himself beloved and feared by the people."

knew he could only do this under the formidable protection of his elderly papal father. And so, in a race against time, Borgia waged war through Romagna, driven by his motto: "*Aut Caesar aut nihil*—Either a Caesar or nothing."

Machiavelli first met Borgia at Urbino in summer 1502 to assess how much of a threat the pope's son was to Florence. Observing Borgia and his methods informed Machiavelli's emerging principal theories of power and politics. One event that would have a deep impact on Machiavelli's ideas was the means by which Borgia reversed a period of bad fortune. Various Italian city-states had encouraged a revolt against Borgia. Realizing he was outnumbered, Borgia feigned reconciliation while cannily building up his forces. In late 1502 Borgia lured his rivals, the Orsini, to the town of Senigallia and had them strangled. Machiavelli carefully recorded the events in a 1503 dispatch.

Cesare Borgia's luck ran out, however, after his father, the pope, died in 1503. His family fell from favor when the new pope, Julius II, removed the Borgias from power and exiled

A 1513 PORTRAIT BY ALTOBELLO MELONE IS OFFICIALLY TITLED "PORTRAIT OF A GENTLEMAN," BUT ART HISTORIANS AGREE THE SUBJECT IS CESARE BORGIA. ACCADEMIA CARRARA, BERGAMO

DEA/SCALÀ, FLORENCE

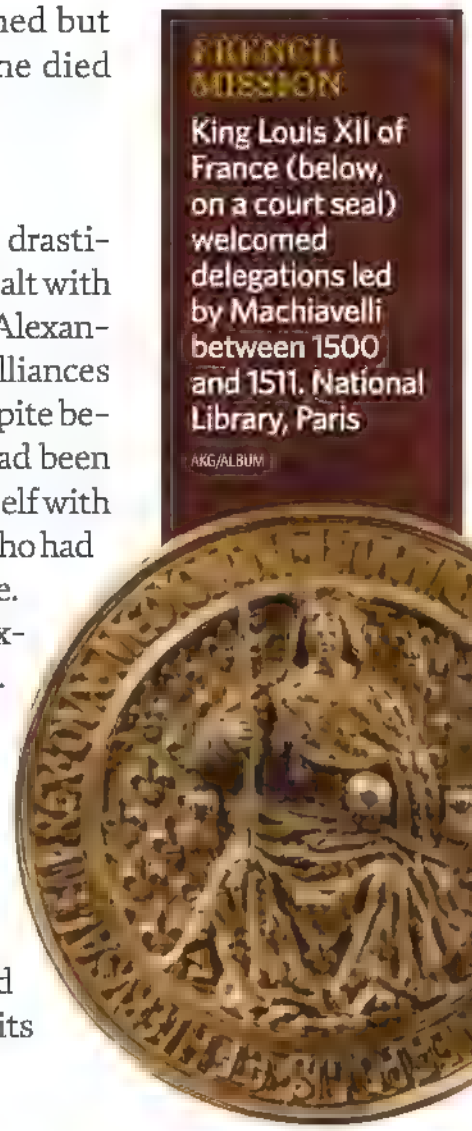
them to Spain. Cesare was imprisoned but managed to escape to Spain where he died in 1507.

From Prison to the Prince

Machiavelli's fortunes did not change drastically at first. On behalf of Florence, he dealt with Pope Julius II in Rome, as he had with Alexander before him, but in 1511, a shift in alliances would wreak havoc on Machiavelli, despite being the consummate survivor. Julius had been pro-French, but he suddenly allied himself with Spain against France. The Florentines, who had close ties to the French, were vulnerable.

In 1512 Spanish troops enabled the exiled Medici to return to Florentine rule. This regime change resulted in Machiavelli being swept into jail and tortured. After his release, he retreated from public life to exile on his farm, where he began writing the work that defined his legacy.

By Christmas 1513 Machiavelli had completed *The Prince*. On the surface, its



FRENCH MISSION

King Louis XII of France (below, on a court seal) welcomed delegations led by Machiavelli between 1500 and 1511. National Library, Paris

AKG/ALBUM

title, in Latin, *De principatibus*, seems to correspond to conventional classical theories of princely governance. Literature such as these were often called "mirrors for princes." Condensing ideas from philosophers like St. Augustine and Plato, these works had existed since the early Middle Ages as "advice manuals" for rulers, exhorting ethical governing along the paths of virtue and righteousness.

Machiavelli's book, however, contained a new and shocking thesis for its time. Written not in Latin, but Italian, *The Prince* exalts ruthlessness and centers on lessons learned from Borgia's tactics. "Cesare Borgia was considered cruel; nonetheless, that cruelty united Romagna and brought it peace and stability," he wrote. Previously, princely conduct guides had dwelled on how a ruler gains power through his or her right and legitimacy to rule. For Machiavelli, however, the gaining of power, however rightful or legitimate, is irrelevant if the ruler cannot then hold on to it. The ends would justify the means.

MEETING PLACE

The Ducal Palace dominates the hill city of Urbino in northeastern Italy. Here, in the summer of 1502, Machiavelli traveled with the chief minister of the Florentine republic, Piero Soderini, to meet Cesare Borgia, to assess the extent of the threat he posed for Florence. The illegitimate son of Pope Alexander VI, Borgia had just conquered Urbino as part of his campaigns to build a state for himself in central Italy.

ISTOCK/GETTY IMAGES

AUDACIOUS CONQUEST

Machiavelli met Pope Julius II in 1506, shortly after the warrior pope had taken Perugia (pictured) with very little military assistance. It was an act of audacity Machiavelli admired.

DEA/G. DAGLI ORTI/GETTY IMAGES

THE POPE TAKES PERUGIA

'SPLENDIDLY WICKED'

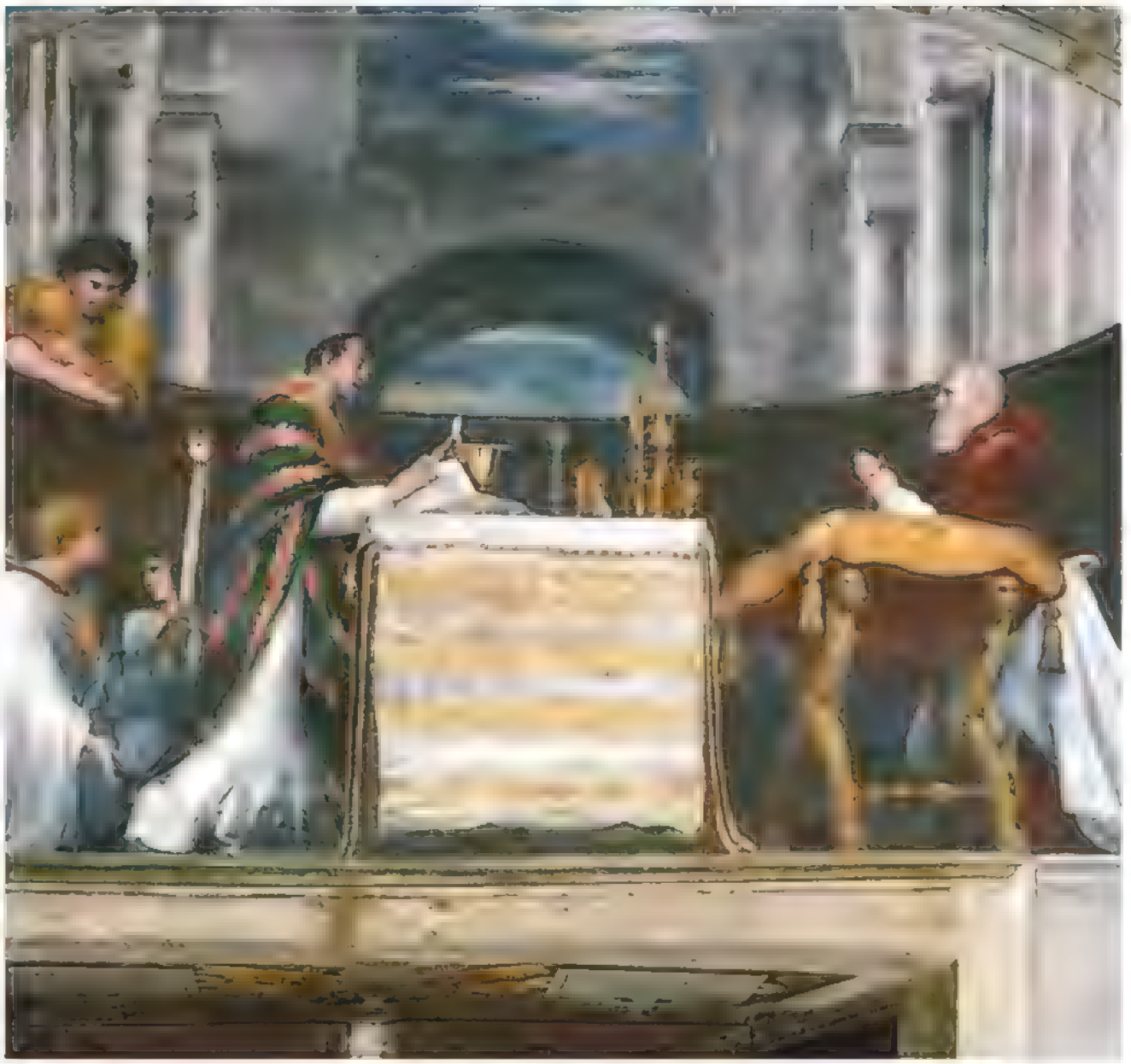
In 1517 Machiavelli wrote the *Discourses on Livy*, which drew parallels between classical Rome and the politics of his own day. This work revisits themes from *The Prince*, including a reflection that certain leaders do not necessarily fall into the conventional moral categories of good and bad. In chapter 24 he cited the example of Pope Julius II's conquest of Perugia, whose aftermath Machiavelli had witnessed firsthand:

Julius II desired to remove Giovanpagolo Baglioni, tyrant of Perugia. And so coming to Perugia [Julius] entered it unattended by troops, although Giovanpagolo was there with a great company of soldiers. And thus, urged on by that impetuosity which stamped all his actions, Julius committed himself into the hands of his enemy—whom he forthwith removed from power. All who saw it remarked on the pusillanimity of Giovanpagolo; nor could they conjecture why Giovanpagolo had not availed himself of this opportunity for crushing his enemy . . . For it could not be supposed that he was withheld by any goodness or scruples of conscience, as he had lived in incest with his sister, and had put his nephews and kinsmen to death. The only inference to be drawn: That men know not how to be splendidly wicked or wholly good.

It is not love that conquers, Machiavelli wrote, but fear: "Love is a bond of obligation which [subjects] break whenever it suits them to do so; but fear holds them fast by a dread of punishment that never passes." The two aims of any prince, Machiavelli argued, is to "maintain his state [i.e., power]" so as to be able to "seek honor and glory." To achieve such goals, a prince must possess "virtue," but of a kind that upends conventional, or Christian, notions of virtuous behavior.

Virtue, in the Machiavellian sense, is an ability to adapt. It is flexible rather than rigid and defined by the circumstances. In a given situation, will generosity strengthen the prince's position? Or would cruelty serve him better? A possessor of Machiavellian "virtue" will know which one to deploy depending on the situation.

The quality of virtue will also allow a prince to adapt to another important Machiavellian concept, that of "fortune." No ruler can stop fortune in full spate. Yet sometimes, fortune can be diverted, when a shrewd prince uses his virtue. During the revolt of the Orsini, Borgia had



WARRIOR POPE

Pope Julius II kneels in an early 16th-century fresco (above), "The Mass at Bolsena," by Raphael. In 1512 Julius helped return power to the Medici in Florence. Apostolic Palace, Vatican City

SCALA, FLORENCE

deployed his "virtue"—cunning and deceit—to turn the tide of his bad fortune.

Following the completion of *The Prince*, Machiavelli dedicated it at first to Giuliano de' Medici, son of Lorenzo the Magnificent. After Giuliano's death in 1516, the book was dedicated to his successor, the Duke of Urbino Lorenzo de' Medici. Machiavelli spent the rest of his life working. He wrote a book on war and a reflection on the principles of republican rule. In later life he served Giulio de' Medici (a cousin of Giovanni and Giuliano), who in 1523 became Pope Clement VII.

Following Machiavelli's death in 1527, however, it was his writing and not his service that would secure his place in history. The advice espoused in *The Prince* led his name to become shorthand for cunning, manipulation, and self-serving behavior—one of the few eponymous adjectives to strongly convey an abstract idea. His open appeal to guile and his subversion of Christian norms were regarded as so abhorrent that, in 1559, the work would be listed in the Catholic Church's Index of Prohibited Books.

To others, the book was refreshingly honest, a survey of the reality of statecraft as it was actually practiced by rulers throughout history. Seventeenth-century philosophers such as Benedict Spinoza defended it. The radical 18th-century thinker Jean-Jacques Rousseau argued its author was "an honest man and a good citizen," and that *The Prince* was an exposure, not a celebration, of the abuse of power. Today the book is foundational, a now classic treatise on governing, indispensable to the study of history and political science.

ITALIAN HISTORIAN AND HISTORICAL NOVELIST ANDREA FREDIANI HAS WRITTEN EXTENSIVELY ON THE ITALIAN RENAISSANCE AND ROME'S EARLY EMPIRE.

Learn more

The Prince
Niccolò Machiavelli, edited and translated by Wayne A. Rebhorn
W. W. Norton and Company, 2019

Be Like the Fox: Machiavelli in His World
Erica Benner
W. W. Norton and Company, 2017

The Artist, the Philosopher, and the Warrior: Da Vinci, Machiavelli, and Borgia and the World They Shaped
Paul Strathern
Bantam Books, 2011

THE PLOT AND *THE PRINCE*

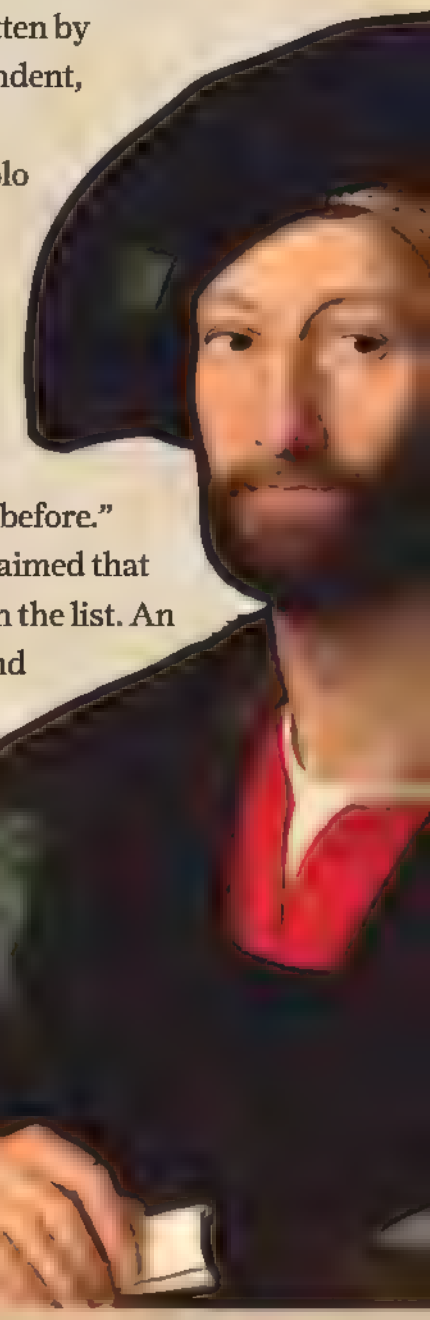
In September 1512 the Medici were returned to power in Florence after an 18-year absence. Machiavelli, by then a 43-year-old senior diplomat, was stripped of his duties, and worse befell him when he came under suspicion for conspiracy against the Medici. He was jailed and brutally tortured. After his release, Machiavelli contemplated his ideas during a period in rural exile where he wrote his seminal work, *The Prince*.

THE "CARTA DELLA CATENA" IS A MAP OF FLORENCE FROM AROUND 1470 AND INCLUDES (1) THE BARGELLO, WHERE MACHIAVELLI WAS JAILED, AND (2) THE EXECUTION SITE OF BOSCOLI AND CAPPONI. COPY FROM THE BARGELLO MUSEUM, FLORENCE
SCALA, FLORENCE

ON FEBRUARY 18, 1513, NICCOLÒ MACHIAVELLI WAS ARRESTED, ACCUSED OF PARTICIPATING IN A PLOT AGAINST THE MEDICI LORDS OF FLORENCE. HIS GRISLY EXPERIENCE WAS THE VIOLENT REALITY OF POWER IN RENAISSANCE ITALY.

1. *ARREST*

In February 1513 Florence was ruled by brothers Giuliano and Giovanni de' Medici, who learned of a plot against their family's newly restored rule. According to an account written by Machiavelli's friend and correspondent, the diplomat Francesco Vettori, a document drawn up by Pietro Paolo Boscoli and Agostino Capponi outlined an anti-Medici plot and supposedly listed 18 to 20 men whom "they supposed would help them after the assassination [of the Medici], even though they had not conferred with them before." Venetian diarist Marino Sanuto claimed that Machiavelli's name was seventh on the list. An order was put out for his arrest, and Machiavelli turned himself in to the authorities. Historians have long debated his complicity in the plot; most agree he knew nothing about it.



GIULIANO DE' MEDICI, REGENT OF FLORENCE. AN EARLY COPY OF A PORTRAIT BY RAPHAEL. METROPOLITAN MUSEUM OF ART, NEW YORK
AKG/ALBUM

2. *TORTURE*

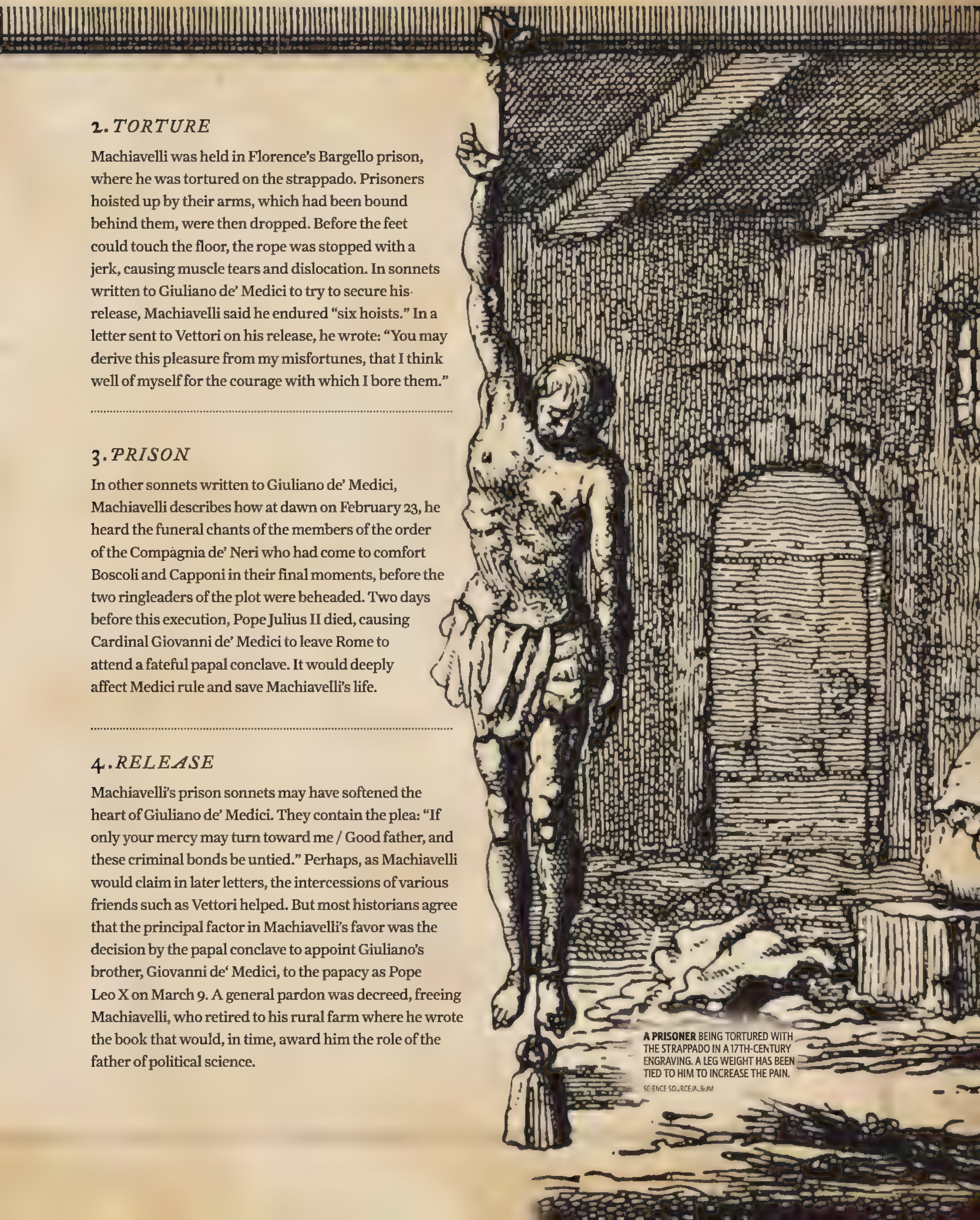
Machiavelli was held in Florence's Bargello prison, where he was tortured on the strappado. Prisoners hoisted up by their arms, which had been bound behind them, were then dropped. Before the feet could touch the floor, the rope was stopped with a jerk, causing muscle tears and dislocation. In sonnets written to Giuliano de' Medici to try to secure his release, Machiavelli said he endured "six hoists." In a letter sent to Vettori on his release, he wrote: "You may derive this pleasure from my misfortunes, that I think well of myself for the courage with which I bore them."

3. *PRISON*

In other sonnets written to Giuliano de' Medici, Machiavelli describes how at dawn on February 23, he heard the funeral chants of the members of the order of the Compagnia de' Neri who had come to comfort Boscoli and Capponi in their final moments, before the two ringleaders of the plot were beheaded. Two days before this execution, Pope Julius II died, causing Cardinal Giovanni de' Medici to leave Rome to attend a fateful papal conclave. It would deeply affect Medici rule and save Machiavelli's life.

4. *RELEASE*

Machiavelli's prison sonnets may have softened the heart of Giuliano de' Medici. They contain the plea: "If only your mercy may turn toward me / Good father, and these criminal bonds be untied." Perhaps, as Machiavelli would claim in later letters, the intercessions of various friends such as Vettori helped. But most historians agree that the principal factor in Machiavelli's favor was the decision by the papal conclave to appoint Giuliano's brother, Giovanni de' Medici, to the papacy as Pope Leo X on March 9. A general pardon was decreed, freeing Machiavelli, who retired to his rural farm where he wrote the book that would, in time, award him the role of the father of political science.



A PRISONER BEING TORTURED WITH THE STRAPPADO IN A 17TH-CENTURY ENGRAVING. A LEG WEIGHT HAS BEEN TIED TO HIM TO INCREASE THE PAIN.

SCIENCE SOURCE/ALBUM

Tamgaly: An Ancient Rock Art Gallery

Since first examining thousands of engravings of bulls and gods in this Kazakh ravine in the 1950s, archaeologists are still piecing together the beliefs of the Bronze Age society that first created them.

The grassland steppes stretch away to the horizon in the far south of Kazakhstan. In a landscape blasted with summer heat and winter cold, the shelter and shade of the Tamgaly gorge, about 100 miles northwest of the former Kazakh capital, Almaty, has been a special place for people for millennia. They have left their mark in the form of 5,000 vivid rock carvings, the earliest of which date from the middle of the Bronze Age, 3,500 years ago.

Some of these carvings are hidden, while others' placement ensures maximum visibility. The petroglyphs stand out in pale contrast to the dark rock revealing myriad drawings: sun deities with rays shining from their heads, warriors on horses, dancing shamans, and herds of animals.

All tell of the different peoples that lived here: Their subjects chart the changes felt through the region from the Bronze Age through the Iron Age to the medieval period, and even much later: Twentieth-century Kazakh shepherds have also left their mark, recording the recent conquerors of the region with depictions of Soviet-era vehicles.

The Marked Place

The Tamgaly gorge is one of several sites in Kazakhstan noted for petroglyphs. (Confusingly, another site rich in petroglyphs farther to the east is named Tamgaly-Tas). The name Tamgaly in Kazakh means "marked" or "painted place," and—as the evidence of 20th-century carvings by shepherds attests—Tamgaly's rock art was clearly known by Kazakhs for many centuries.

In 1957 a Soviet team of archaeologists, led by Anna Maksimova, began exploring and documenting the artwork in the area. They started the complex task of sorting the thousands of engravings into groups. Hers and subsequent investigations—most recently those undertaken by Alexey Rogozhinsky in the early 2000s—have dated the forms, analyzing them to discern what such figures meant to the people who created them.

Maksimova's studies confirmed that Tamgaly had been inhabited, almost without interruption, since circa 1500 B.C., a period of the Middle Bronze Age. Lowering water tables in the steppes had attracted more settlement across the

GRAVEN IMAGES

1500–900 B.C. Bronze Age peoples etch the first 3,000 petroglyphs at Tamgaly. Many depict local animals and deities.

800–300 B.C. Despite a population decline at Tamgaly, Early Iron Age peoples continue to craft images on the rocks.

A.D. 700–1900s Rock art continues to be made from the medieval period through the modern era with changes in subjects.

1957 Soviet researchers, led by Anna Maksimova, begin to study the petroglyphs, dating the earliest to the Bronze Age.

THE LONG HORNS of a horse dominate a Tamgaly petroglyph that dates to the Bronze Age. The distinctive features are typical of Kazakh rock art from this period.

MARINA PISSAROVA/ALAMY/ACI

region during this period, and the lush pastures around Tamgaly drew herding communities. Since Maksimova's first survey of the site, more Bronze Age settlements and several funeral complexes have been uncovered.

Over millennia, earthquakes had split Tamgaly's sandstone rocks and created flat, smooth surfaces. At some stage, Bronze Age peoples first began to etch petroglyphs into the soft, smooth rock using sharp stones or metal instruments to create pictures in the dark patina on the rock faces.

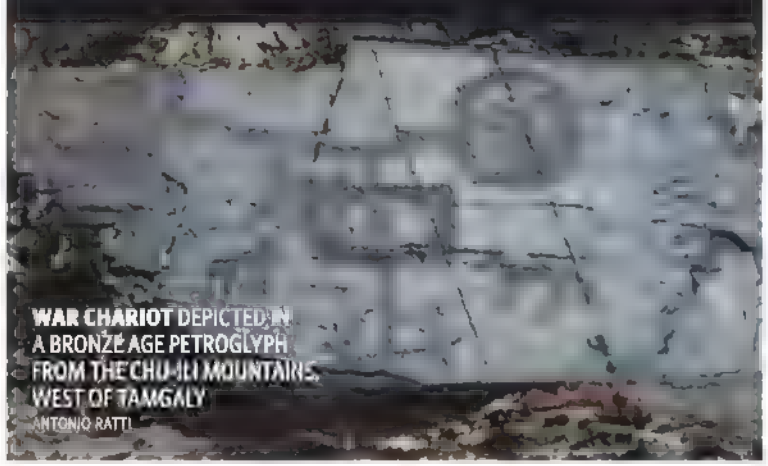
Shamans and Sun Gods

The archaeological studies carried out at Tamgaly divide the 3,000 oldest petroglyphs into five groups, clustered mainly on the eastern slopes around a central section of the Tamgaly gorge.

Farthest north is Group I, consisting of 100 carefully hidden engravings of human

NEW DISCOVERIES

IN RECENT DECADES, exploration of the Chu-Ili mountains around Tamgaly has uncovered new caches of rock art. Researchers from the University of Almaty have documented numerous smaller rock art sites scattered across a large area about 60 miles to the west. The petroglyphs discovered here share similar iconography and styles with those of Tamgaly.



WAR CHARIOT DEPICTED IN A BRONZE AGE PETROGLYPH FROM THE CHU-ILI MOUNTAINS, WEST OF TAMGALY

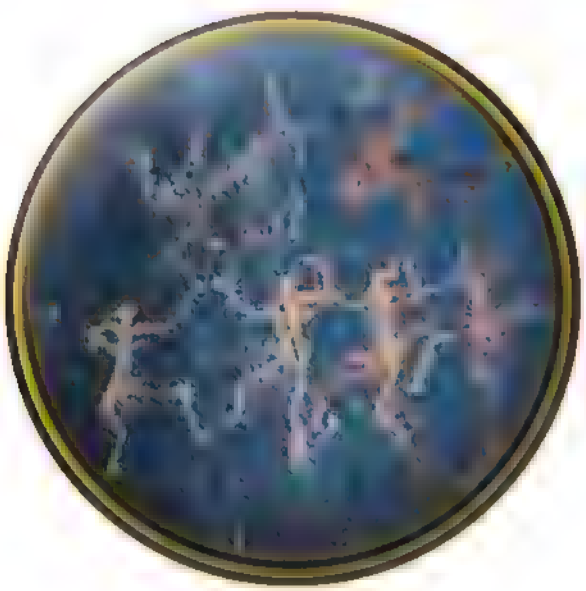
ANTONIO RATTI

A BULL bears a distinctive "sun-headed" figure, believed to be a sun god, on its back. Their interaction is unique to Tamgaly, and it may have represented the oppositional forces of light and darkness.

KEREN SU/ALAMY/ACI

beings—perhaps shamans, who appeared to have access to the realm of spirits—as well as hunting vignettes and depictions of local wildlife, including wolves.

Farther south is Group II, which is made up of more visible engravings and includes depictions of worshippers and shamans, representations of sexual intercourse, and animals such as deer and bulls. Group III consists of 800 engravings, many depicting people engaging in animal-related rituals, especially involving bulls, horses, and cattle.



RITUAL DANCERS AND CAMELS IN AN EARLY IRON AGE ENGRAVING AT TAMGALY

KEREN SU /ALAMY/ACI

Group IV, the only cluster on the western side of the gorge, is dominated by a panel depicting human-like figures dancing around a female figure who appears to be giving birth. This grouping is sited on the upper slopes and is clearly visible from the gorge.

Dark and Light

Group V, the cluster farthest south, contains some 1,000 petroglyphs. Their organization appears both more complex and deliberate. Ascending a slope, a hierarchy related to altitude becomes evident: The lower section is dominated by depictions of worshippers and shamans. Higher up the slope appear distinctive figures that many believe are sun gods. They have human forms topped by circles with emanating rays. Higher still, a panel shows more of these solar deities with a chariot.

These 3,000 petroglyphs in Tamgaly's five gorge-based groups have been dated to the Middle Bronze Age (1500–1200 B.C.) and the Late Bronze Age (1200–900 B.C.). There are 26 surviving sun-head figures at Tamgaly, leading scholars to suggest that this sun god was especially revered here.

Another figure that predominates in the Bronze Age engravings is the bull, which like the sun-god forms, can be seen at other petroglyph sites in the region. Only at Tamgaly, however, are there examples of sun gods

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ARCHERS encircle a [illegible] horse. The Bronze Age [illegible] at Tamgaly distinguished horses from bulls by depicting the former with upright ears.

TOM TILL/ALAMY/ACI

interacting with the bulls. In a Group IV petroglyph, a solar deity stands on a bull. Scholars have interpreted this arrangement to be a dualist idea of the darkness of the black bull in opposition to the light emitted in rays from the sun-head.

Other interactions are represented throughout the petroglyphs at Tamgaly: Humans relate with animals, such as horses, by riding or mastering them. In other scenes, shaman figures reach out to the spirit world by donning animal skins. The panel scene in Group IV in which people dance around a woman giving birth is believed to represent a ritual dance carried out during a birth in order to obtain protection from the gods.

Artistic Expressions

Settlement in the area began to decline by the end of the Bronze Age, but researchers believe that the area was still inhabited. The people who lived there during this period left their mark. There are more than 2,000 additional petroglyphs that date to this transitional period.

Among these petroglyphs that date to the Early Iron Age (800–300 B.C.) are more detailed depictions of animals, such as camels and deer with branching horns. These pieces were carved when the area was dominated by the Saka, an Iranian steppe people. The human figures are more simply rendered resembling a child's stick figures drawings. Later, the region was settled by Turkic tribes, and much later engravings (A.D. 700–1300) depict scenes from aristocratic Turkic life: knights with banners and hunting scenes. Many of the Turkic figures are superimposed over older work.

The many time periods encompassed by the site present a challenge to today's scholars, who still have much to unravel. Researchers Alexey Rogozhinsky and Renato Sala, who carried out extensive surveys after Tamgaly was designated a UNESCO World Heritage site in 2004, are making finer distinctions within the Bronze Age groups, noting early and late styles.

They and other scholars of the wonders of Tamgaly stress that the engravings cannot be seen as isolated images. They must be studied as parts of a whole, whose overall meaning, and relation to the landscape, has yet to be fully decoded.

—Antonio Ratti

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Next Issue

FACING PLYMOUTH BAY, A STATUE OF THE WAMPANOAG LEADER MASSASOIT WAS ERECTED IN 1921 ON COLES HILL, PLYMOUTH, MASSACHUSETTS.
RUSSELL KORD/ALAMY

THE WORLD OF MASSASOIT

IN THE 1600S the lands of the Wampanoag in southern New England were not only one of the most densely populated areas of native North America, they were also the site of intense political rivalries. The respected Wampanoag leader known as Massasoit faced the challenge of protecting his people from their local rivals, the Narragansett, while navigating a complex new relationship with the English pilgrims who had sailed aboard the *Mayflower* and landed on their shores in the closing months of 1620.

THE YOUNGEST RENAISSANCE MASTER

ARTIST AND ARCHITECT, Raphael was the youngest of the Renaissance's great trio of artists, which included himself, Leonardo da Vinci, and Michelangelo. Dying at the age of 37 in 1520, he left behind a prolific body of work, ranging from the magnificent epic frescoes of the so-called Raphael Rooms in the Vatican Palace to the intimate and tender depictions of Madonna and Child. His broad body of work reflected his immense talent and vision, ensuring that his influence would grow and spread over the centuries that followed.

RAPHAEL, SELF-PORTRAIT, 1504-06. GALLERIA DEGLI UFFIZI, FLORENCE
SCALA, FLORENCE

The Stonehenge Story

Standing for millennia on a plain in southern England, Stonehenge is the most iconic of all Neolithic sites. Recent excavations are yielding not only new insights into Stone Age life but also how Stonehenge fit with the world around it.

Royal Letters of Egypt

The city of Amarna was Egypt's capital for less than 30 years, but its legacy would be a timeless treasure inscribed in clay: the Amarna Letters. These tablets reveal the intimate details of communications between pharaohs and their allies.

A Roman Love Affair With Athens

The Roman emperor Hadrian sought to restore Athens to its former glory through libraries, baths, and temples—including completion of the Temple of Olympian Zeus. In A.D. 131 the city erected the Arch of Hadrian in his honor, on which he, along with Theseus, is named as a founder.

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